

37th Annual Dinner & Induction Ceremony

May 12, 2023

William Bascom Donald Hall John Hannon James Lally Robert Lally Bradley Roberts

Banchetti by Rizzo's 550 North French Road Amherst, New York

Niagara Frontier Aviation & Space Hall of Fame, Inc.

Welcome

The Niagara Frontier Aviation and Space Hall of Fame welcomes you to the 37th Annual Dinner and Induction Ceremony. We are proud to host this event which was originated at the Amherst Museum in 1985.

We are pleased to continue the fine tradition of honoring those men and women from Western New York and the surrounding regions whose talents and work have made innovative and lasting contributions to our nation's aviation and space history.

Hall of Fame inductees for the years 1985-2023 are listed in this booklet. Each inductee brings a high degree of distinction to Western New York and to our aerospace community.

A permanent display of all inductees to the Hall of Fame, including a kiosk with photographs and a summary of their accomplishments, is maintained at the Niagara Aerospace Museum (see pages 16 & 17).

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Niagara Frontier Aviation & Space Hall of Fame

37th Annual Dinner and Induction Ceremony

May 12, 2023

PROGRAM

Walter Gordon Master of Ceremonies

Call to Order

Introductions

Local Organization Announcements

Dinner

Aero Club Scholarship Awards:

The Fran Bainbridge Flight Training Scholarship: Sharon Reithel - Lima Christian School

The Thomas P. Kopera Post-Secondary School Tuition Assistance Scholarship: Sophie Bates - Purdue University

Induction Ceremony

Closing

Niagara Frontier Aviation & Space Hall of Fame

Purpose

To honor and enshrine all those men and women, who in their own unique way, contributed significantly to the history and development of aviation and space on the Niagara Frontier

About the Hall of Fame

The idea of the Aviation & Space Hall of Fame was a natural extension of the hopes of Michael F. Steffen (1897-1976) and Ivan H. Brooks (1896-1990). Through their pioneering efforts, the stage was set for the establishment of an aviation section at the Amherst Museum.

In 1999, the aviation collection of the Amherst Museum was moved to the Niagara Aerospace Museum. The Museum also agreed to display and maintain the Hall of Fame Wall of Honor.

The Hall of Fame committee was reorganized and agreed to continue the fine traditions established by the Amherst Museum.

Criteria for Nomination to the Hall of Fame

Nominees may be individuals living or deceased who made a specific contribution to aviation or space while residing in Western New York. Nominations from the general public are welcome. Complete criteria and a nomination form may be found on the Niagara Aerospace Museum website at:

NiagaraAerospaceMuseum.org/hall-of-fame

Nominations are reviewed and voted on by the Niagara Frontier Aviation & Space Hall of Fame Board during March of each year with formal induction of those selected in May.

2023 Inductees

Willam Bascom Bell

William Bascom was born on 10 April, 1931. He attended Stuyvesant high school, considered to be the best technical school in New York City at that time, followed by the College of the City of New York where he earned a B.S. in electrical engineering.

In 1953, he was hired by Bell in the hydraulic servo development group, where he solved a serious flight control problem on the Rascal missile by designing a dry first stage for the servovalves.



Bill's next major project was in support of the X-22 tilt-rotor beginning in the late 1950s. He worked on the artificial feel and trim system and the stability augmentation system for this aircraft. The X-22 was a true in-flight simulator, capable of simulating the flight characteristics of many different V/STOL concepts. The last aircraft built by Bell in Western New York, the X-22 was operated by Cornell Aeronautical Laboratory and then Calspan from 1962 through 1984. Its legacy lives on today in Bell's V-22 Osprey and V-280 Valor.

His most famous program was the Lunar Lander Research and Training Vehicles (LLRV and LLTV), flying flight simulators which were used to train Apollo astronauts to land on the Moon. These pioneering fly-by-wire vehicles replicated 1/6 lunar gravity on Earth by using a centrally mounted jet engine gimbaled to vertical to automatically cancel out 5/6 of the weight of the craft. Neil Armstrong credited the LLTV with saving his life during the Apollo 11 mission. Bill also contributed to the Bell Automatic Carrier Landing System, Gravity Gradiometer, and the accelerometers on Trident ballistic missiles. These systems are all still in service today.

Bill Bascom passed away in December 2014 but is remembered as a highly intelligent, humble, and friendly engineer and manager by those who knew him.

Donald Hall Moog

Western New York native Don Hall was born in Buffalo in 1927. After high school and two years in the U.S. Navy, he went to work for General Motors and attended General Motors Institute, graduating in 1951 with a B.S. in Mechanical Engineering. After a few years back at GM, Don was asked to transfer to Michigan. Instead, in 1955 he joined Moog Servocontrols.





and Marc Chaves developed and patented a mechanical feedback servovalve using a novel feedback beam that sensed position of the spool. This design became an industry standard and millions of servovalves using this approach have been used all around the world in commercial and military aircraft and space launch vehicles. Hall also led the development of the Moog "deflector jet" servovalve which is now used on all Boeing and Airbus jets.

Don headed a development engineering department that designed the actuators that provided steering control for the Saturn launch vehicles on the Apollo program. This same group developed the actuators that steered the Space Shuttle at launch and controlled the flight surfaces on landing.

In 1969, Moog was awarded a contract to provide a very complex flight controls package for the McDonnell Douglas F-15. Essentially performing the role of a mechanical computer, Don participated in the design and then managed the entry into production. He served a similar role in the development of the Flight Control Actuation System for the B-2 stealth bomber.

Donald Hall retired from Moog in 1988 and passed away in 1999. He was indeed one of the Moog pioneers. By his own work and the example he set, Don Hall inspired a generation of engineers to work together to find solutions for problems that the less adventurous considered impossible.

John Hannon Eastman Kodak and ITT

John received a bachelor of science from Stevens Institute of Technology in 1965 and an MBA at Rochester Institute of Technology in 1972. At Kodak and its successors he had a 50 year career in the development and execution of testing and alignment of optics for space applications, and laser fusion experiments.

Early in his career he developed and executed testing methods in support of classified projects including the recently declassified Gambit-3 (KH-8) program.



Later he was responsible for the alignment plan for the High Resolution Mirror Assembly at the heart of the Chandra X-Ray Telescope. He was also responsible for test plans and the testing of the 2.4 meter back-up primary mirror for the Hubble Space Telescope, and numerous other optical components and systems. He spent 9 years as the department head of Optical Test Technology (OTT) where he provided management, staffing, planning and technical coordination for a large optical metrology department.

While at OTT John personally managed two critically important projects, study of the Hubble wavefront anomaly which was decisive in recovering the optical quality of the telescope, and a study of anomalous scattering from Beryllium optical surfaces, which had importance for infrared astronomy and other applications. He later became the organization's senior metrology engineer where he provided development expertise for numerous projects.

While at Kodak he presented technical papers to the Optical Society of America and SPIE. He also has three patents associated with optical testing. He retired from Kodak in late 2002, and became a technical consultant to Kodak's successor, ITT Technologies (now part of L3 Harris), through 2016 where he provided mentoring in optical testing and supported proposals and execution of optical projects including the Geo-Eye and Worldview commercial resource satellites as well as various classified programs.

James Lally PCB Piezotronics

"I can recall as a kid back in the 1930s, just seeing an airplane fly over was not common. At the sound of an airplane, all eyes turned to the sky."

Jim's love of aviation led him on a lifetime of not only enjoying travel, but also being instrumental in developing technology which made the global aircraft, airline, and space industries safer and more capable.

In 1967, Jim and his brother Bob, co-



founded PCB Piezotronics in Buffalo. The focus of their technical efforts was primarily on the development and application of integrated circuit technology to piezoelectric sensors. Beginning with the creation of sensors to measure cylinder combustion pressure, PCB's product line quickly expanded to include vibration and force sensors. Their development and application of low impedance (ICP®) circuitry to crystal based dynamic sensors is now technology which is the worldwide standard. Many of the sensing products manufactured by PCB are integral to the test, safety, and operation of the modern airliners and spacecraft.

Upon "semi-retirement", Jim volunteered at the Curtiss Museum in Hammondsport, NY. Jim helped with the fabrication, testing, and documentation of a reproduction of the 1914 Curtiss America flying boat and had the pleasure of watching it fly across Keuka Lake at the 2006 Sea Plane Homecoming.

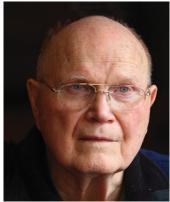
At the 2005 International Modal Analysis Conference, Jim was presented with the D.J. DeMichele Award from the Society of Experimental Mechanics for contributions to the measurement and test industry. In 2015, Jim was presented the Lifetime Achievement Award at the Shock and Vibration Symposium in Orlando. This recognized Jim's 60 years of dedication to providing dynamic sensor technology in blast, ballistics, shock, vibration, acoustics, strain, and dynamic force. The award also recognized his generous contributions to educational institutions and his professionalism in corporate interactions.

Robert Lally PCB Piezotronics

In his final year, writing his LinkedIn profile, Bob shared the following:

"At age 93 and totally disabled from combat injuries, I am nearing the end of an exciting life as an ironworker, rifleman, engineer, and businessman blessed with many helpful, gifted friends and comrades. My creations, with a lot of help, include popular products and successful companies."

Bob returned home from the US Army in



WWII as a soldier severely wounded in battle and as a recipient of two Bronze Stars for his heroic service. Taking advantage of the Division of Special Services for War Veterans, he earned a master's degree in engineering. He also completed flight training, which he had started in the army, and earned a private pilot license.

In 1950, Bob joined the Bell Aircraft Corporation where he helped develop guidance systems involving gyros and accelerometers for the Rascal air-to-surface guided missile and the Shrike missile testbed that preceded it. He also created a number of sensing devices at Bell to measure impact on materials during testing, including modally-tuned test hammers, pendulum hammer calibrators, and the gravimetric calibrator. It was at Bell he came up with the idea for the two-wire ICP (Integrated Circuit Piezoelectric) sensor and coined the term ICP.

The work at Bell led Mr. Lally to help found two spin-off companies. Joining Bell colleague Walter Kistler in 1955, they started a new company, Kistler Instrument Corporation. In 1967, Bob and his brother Jim co-founded PCB Piezotronics in Buffalo. Hiring many former Kistler Instrument employees, they applied integrated circuit technology to piezoelectric sensors that monitor pressure, sound and vibration in cars, planes, ships, power plants and industrial processes. Their development and application of low impedance (ICP®) circuitry to crystal based dynamic sensors is now technology which is the worldwide standard.

Bradley Roberts Gemcor

Bradley Roberts had a remarkable career spanning 56 years at Gemcor (General-Electro Mechanical Corp.), where he held various positions in the design, project management, engineering, sales, marketing, and customer service departments. He graduated from the State of New York University at Buffalo with an AAS in Technology with highest distinction in 1968 and a Bachelor of Science Degree in Engineering Cum Laude in 1971.



Brad started his career at Gemcor as a designer for the floor track and turntable system for the Boeing 747 Wing Panel Riveting Program. Soon promoted to Chief Systems Engineer, he was subsequently asked by Gemcor founder Thomas H. Speller Sr., to manage the sales department on the condition he would also be responsible new product development, installations, and service as well as a small line of electro-mechanical brakes and clutches. He worked his way up to Director of Sales and Marketing and then Director of Customer Service, responsible for equipment upgrades, rebuilds, relocations, and new equipment sales.

Roberts holds numerous patents with Gemcor relating to the automation of the riveting process, many of which applied to the assembly of the C-17 and 777. Two prominent examples are *Apparatus for Positioning a Wing Panel for Riveting* and *Method and Apparatus for positioning a Workpiece and Tooling*. His method of squeeze-squeeze fuel-tight riveting is still the standard today in mechanically fastened fuel-tight assemblies.

Throughout his career, Roberts traveled all over the US and the world, selling machines that build wing and airframe panels and ensuring that they were put into production smoothly. He retired as the Director of Technology Renewal, responsible for equipment upgrades, rebuilds, and relocations. Roberts had a close relationship with Mr. Thomas H. Speller Sr., who served as his mentor until his passing in 1988.

Past Hall of Fame Inductees

1985 Inductees – Michael F. Steffen, Ivan H. Brooks, Lawrence D. Bell, Gordon W. Campbell, H. Lloyd Child, Glenn Hammond Curtiss, Joseph H. Dotterweich, Major Reuben H. Fleet, Charles "Dolly" Foersch, Dr. Clifford C. Furnas, Robert P. Harper, Leslie L. Irvin, Alvin "Tex" Johnston, Bartram Kelly, Cecilia Roy Kenny, A.D. Palmer, Jr. Kathleen Potoczak, Jack B. Prior, Edwin H. Ronne, Ira G. Ross, E. Howard H. Roth, John Satterfield, Earle M. Scott, John C. Seal, Robert M. Stanley, John W. Van Allen, Ray P. Whitman, Reginald V. Williams, John Woolams, Robert A. Wolf, Robert J. Woods, Burdette Shields Wright, Arthur Young

1986 Inductees – John L. Beilman, Joseph A. Cannon, Richard H. Frost, Nello L. Infanti, Floyd W. Carlson, Stanley Fliss, Stanley W. Smith, Dr. Theodore P. Wright

1987 Inductees – Ethel Fedders, Chalmers H. Goodlin, Benson Hamlin, Joseph Mashman, William M. Smith, H. Leibee Wheeler

1988 Inductees – Howard A. Benzel, Nathaniel Duffy, William G. Gisel, William C. Moog, Jr., J. Frederick Schoelkopf, John F. Strickler, Jr.

1989 Inductees – Waldemar O. Breuhaus, George A. Hof, Jr., George D. Ray, Roy J. Sandstrom

1990 Inductees – George T. Baltus, Francis P. "Pete" Bassett, Gregory Ductor, Dr. Alexander H. Flax, Edgar P. Rhodes, Roland Rohlfs

1991 Inductees – Edmond O. Carmody, Donald A. Heussler, M.R. "Jim" Kaletta, John "Jack" Russell, J.L. "Skip" Ziegler

1992 Inductees – Randolph F. Hall, G. Wayne Hawk, David W. Howe, Thomas R. Lawson, Ernest H. Metzger, Dexter Rosen, Emerson W. Stevens

1993 Inductees – Stanley A. Dybowski, Charles F. Harmon, Robert C. Kidder, R. Douglas Rumsey, Thomas H. Speller, Sr.

1994 Inductees – Robert L. Holloway, Charles B. Kirkham, Edmund S. Marek, Arthur Nutt

1995 Inductees - Charles R. Chalk, T. Desmond Earl, Joseph Gwinn, Jr., Howard "Art" Krege, Wendell F. Moore, John Olmsted, Jr., Alvin E. Ouchie

1996 Inductees – John P. Chisholm, Paul C. Emmons, John E. "Jack" Heine, Kenneth L. Levin, Anello "Joe" Marchese, Vincent B. Paxhia, Edward C. Radel

1997 Inductees – Donald S. Clark, Fredric E. Flader, Clarence "Casey" L. Forrest, Eugene "Crash" W. Hetherly, Anthony W. Riccio, Arno E. Schelhorn

1998 Inductees – Dr. Johannes (Hans) G. Goerner, Walter P. Kistler, John J. Lee, Walter Tydon

1999 Inductees – Kenneth D. Garnjost, Stanley J. Kakol, Paul V. Marrone, Charles E. Treanor, Clement J. Turansky, C. Stewart Watt

2000 Inductees – Joseph T. Ethier, William Kamprath, William F. Milliken, Jr., James A. Moynihan, Dr. Philip Reynolds, Harold T. Schoultz

2001 Inductees – Martin R. Bates, Gifford Bull, Gunter P. Heinze, Dr. Michael S. Holden, Lewis Michnik, John Nalbone, Harland Poyer, Edward C. Schwartz

2002 Inductees – Allen F. Donovan, Paul D. Faltyn, Harold K. Fletcher, Owen Q. Niehaus, Joseph R. Piselli, George T. Skinner **2003 Inductees** – Kevin R. Caffery, James N. Dittenhauser, George R. Ord, Robert D. Roach, Jr., William P. Suitor, Dr. Nicholas D. Trbovich

2004 Inductees – Frederick A. Boorady, Sherwood H. Calhoun, Michael L. Parrag, John M. Senneff P.E., Paul H. Taylor, William J. Thayer, Edward P. Unwin

2005 Inductees – John F. Ball, Robert G. Dart, Hugh M. Neeson, George A. Reed, William W. Swenson, P.E., Hans-Georg Albert Toews, P.E., Walter J. Young

2006 Inductees – Maxwell Bennett, Edward A. Farchman, Herman W. Goldstein, Louis H. Knotts, Robert A. Rohrer, Dr. Elizabeth Olmsted-Ross

2007 Inductees – Robert T. Brady, Richard Byron, Arthur L. Fornoff, Edward F. Hensley, Michael J. Knoll, Robert A. Stone

2008 Inductees – David Coe, Donald Coe, J. Russell Easter, Bob Miller, Neil E. Nolf, Darla Richter

2009 Inductees – John Carr, Nelson Faso, Robert H. Maskrey, Birch Matthews, Roger J. Noury, Earnest, Paul & William Schweizer

2010 Inductees – David G. Forman, Lawrence H. Gill, Donald G. Hobel, Charles Olmsted, Frank M. Salisbury, Clinton Philip Warner, Norman C. Weingarten

2011 Inductees – Gabriel & Abraham Elias, Herbert O. Fisher, Leslie, Paul & Stuart Schweizer, Ray W. (Bill) Smith, William B. Wheatley

2012 Inductees – August A. Cenkner, Jr., Robert W. Dietrich, Warren C. Johnson, William G. Lange, Richard P. Lansill, Douglas H. Morash, Jeffery H. Peer **2013 Inductees** – Dr. Donovan R. Berlin, Ronald E. Ciura, Robert W. Fausel, Thomas F. Leney, Craig M. Schmidt

2014 Inductees – Clive Affleck, Lee Carey, Richard Cummins, David Dunlap, Giles Hofmeyer, Albert Jircitano, Eric Ohmit, Edward Sing

2015 Inductees – Aurelius Chaves, Jr., Mark Davis, Otto Kohl, Edward W. Rupp, Walter J. Rusnak

2016 Inductees – Merrell Lane, Franklin G. Miller, William J. Rae, James C. Reddig, William M. Shempp, Niagara Frontier Vintage Aircraft Group

2017 Inductees – Donald Boyer, Leo Chase, John Z. Colt, Sr., Thomas Peter Neal, Rogers E. Smith, Charles P. Spoelhof, Richard W. Stowe

2018 Inductees – Dr. Michael G. Dunn, Harry A. Ferullo, Dr. H. Robert Leland, Mel Ryder, John A. Spina, William R. Vanecek

2019 Inductees – Franklin C. Anderson, Frances A. Bainbridge, David Feld, Robert E. Keim, Robert E. Kinzly, Dr. John A. Lordi, John H. Shafer, L. Jack Williams

2020 and 2021 Inductees – Nicholas D. Change II, Paul R. Deppe, Angelo E. "Jack" DiFrancesco, Edgar L. Green, Jr., Dr. H. Frank Hicks, Jr., Dr. Joseph Mollendorf, Dennis J. Paradowski, Richard A. Passman, Blanche Stuart Scott, Arthur B. Simmons

2022 Inductees – James Bellaire, John Crassidis, Keith Havey, Ronald Parker, David Schaeffer

2023 Inductees – William Bascom, Donald Hall, John Hannon, James Lally, Robert Lally, Bradley Roberts

Thank You To Our Event Co-Sponsors

Aero Club of Buffalo American Institute of Aeronautics and Astronautics Niagara Aerospace Museum

And Niagara Aerospace Museum Supporters

Bell Flight Calspan, Inc. Community Foundation of Buffalo Moog, Inc.

And a special thank you to Pat Pedersen and Judy Kirkwood

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Niagara Aerospace Museum

The Museum Exhibition Site is open in the former Niagara Falls Airport Terminal. Visitors are welcome Saturday and Sunday 11:00 a.m. to 4 p.m. To schedule Group Tours please call the business office at 716-297-1323 to make arrangements.

The museum showcases Western New York's rich aviation and aerospace history with aircraft displays, historical artifacts, and stories from the early days of aviation to current events in the industry.

All correspondence should be sent to:

Niagara Aerospace Museum 9990 Porter Road at Niagara Falls Int. Airport Niagara Falls, New York 14304

Telephone: (716) 297-1323

E-mail: info@NiagaraAerospaceMuseum.org

Website: NiagaraAerospaceMuseum.org

Memberships, donations to the collection, and volunteer efforts are always appreciated.



NOTES



"Six crews landed their Lunar Modules on the moon. They landed on the dusty sands of the Sea of Tranquility and the Ocean of Storms. They landed in the lunar highlands at Fra Mauro and on the Cayley Plains. They landed near the Apennine and Taurus Mountains. Each landing, in widely different topography, was performed safely under the manual piloting of the flight commander. During no flight did pilots come close to sticking a landing pad in a crater or tipping the craft over. That success is due, in no small measure, to the experience and confidence gained in the defining research studies and in the pilot experience and training provided by the [Bell] LLRV and LLTV."

- Neil Armstrong