This iconic photograph by Tom Lennon shows Bell X-2 #2, 46-675, with a collapsed nose gear after its first glide flight at Edwards Air Force Base, 27 June 1952. Bell chief pilot Jean “Skip” Ziegler is still in the cockpit. Ziegler was lost, along with crew chief Frank Wolko, on 12 May 1953 after an in-flight explosion of the X-2 while on a captive flight under the B-50 carrier aircraft over Lake Ontario. The badly damaged B-50 landed at Niagara Falls but never flew again.

During the ninth powered flight of X-2 #1, 46-674, on 23 July 1956, Air Force LtCol Frank “Pete” Everest achieved a world speed record of Mach 2.87. During its thirteenth and last flight two months later on 27 September, a new record was set when Capt Milburn “Mel” Apt reached Mach 3.2 before losing control of the aircraft. Unable to recover, Apt lost his life while attempting to bail out and the X-2 crashed in the desert, ending this world-beating but ill-fated program.
Welcome

The Niagara Frontier Aviation and Space Hall of Fame welcomes you to the 38th 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 1985-2024 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).
Niagara Frontier
Aviation & Space Hall of Fame

38th Annual
Dinner and Induction Ceremony

May 10, 2024

PROGRAM

Walter Gordon
Master of Ceremonies

Call to Order

Introductions

Local Organization Announcements

Dinner

AIAA Niagara Frontier Section Young Professional Award
Dr. Eleonora Botta, University at Buffalo

Aero Club of Buffalo Scholarship Awards:
The Fran Bainbridge Flight Training Scholarship:
Felice Rucci – CAP Cadet Wings Program and the University at Buffalo

Jim and Bob Lally Aeronautical Engineering Scholarship:
Gavin Rauh – Orchard Park High School

Hall of Fame 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.
Ed Gribben grew up in Indiana and attended Purdue University, graduating in 1963 with a B.S. in Mechanical Engineering. He began his career as a design engineer for Rocketdyne providing design engineering support for the RCS thrusters used on the Gemini and Apollo capsules.

In 1966, Ed joined Bell Aerospace as a design engineer in the Propulsion Systems Group working on the Minuteman III PSRE. Bell delivered over 1000 PSRE systems for Minuteman. Ed then moved into chemical laser development with Wayne Soloman, working on the US Army’s Multi-Purpose Chemical Laser (MPCL) program as a technical leader, demonstrating both technical and programmatic skills. He refined these skills as program manager and technical leader on the MILSTAR program.

In 1989, Ed joined Atlantic Research Company (ARC), who had purchased the Propulsion business from Bell in 1987. Ed became program manager for ARC’s 5 lbf biprop thruster that was sold to numerous US and international customers. In the late 1990s, Ed managed a program for Lockheed Martin to revive the Agena engine for upper stage use. Labeled Agena 2000, the program achieved a 60 second hot-fire test of the prototype engine in 1998.

Under new ownership by AMPAC, Ed managed the ‘tank to thruster’ propulsion systems used in target vehicles for the Missile Defense Agency. He then became Program Office Manager for the company, providing program management directly on contracts as well as managing the staff of program managers. Ed’s ability as a mentor was highly valued within the organization, most notably for his dedication to the staff and their development. As a result of his long-standing commitment to supporting his fellow employees, Ed was the first inductee to the company’s Hall of Fame in 2011.
G. Warren Hall
CAL, Calspan and NASA

G. Warren Hall graduated from the University of Virginia with a bachelor's degree in Aeronautical Engineering and joined the Navy where he flew the McDonnell F3B “Demon”. After the Navy, he joined Cornell Aeronautical Laboratory (now Calspan) in 1965 as a test pilot. He earned his Master's Degree in Aerospace Engineering and an MBA from the University at Buffalo.

At CAL and Calspan, Mr. Hall worked with highly sophisticated “variable stability” aircraft, including a modified T-33 used to simulate the new lifting body shapes for outer space reentry. He logged over 100 hours in the Bell X-22A V/STOL aircraft, for which he was recognized for his expertise in aircraft handling qualities and innovativeness with electronic flight control systems, being described as an “excellent pilot and engineer”. Professionally, he has authored 28 Technical Reports and 45 Technical Papers and Journal Articles.

In 1977, Mr. Hall joined NASA Ames Research Center as a Research Test Pilot. and managed the Airborne Science and Flight Research Aircraft Programs until 1998 when he became the Director of the Safety, Environmental and Mission Assurance Directorate. He completed 28 years of military service before retiring with the rank of Colonel.

In 2003, he published a book, “Demons, Phantoms and Me, A Love Affair with Flying”, chronicling his flying experience from 11th grade through his Navy career.

Over his career spanning almost three decades, Mr. Hall flew over 65 different types of aircraft including the X-14B, XV-15, X-22A, AD-1 Swing Wing Aircraft, Quiet Short haul Research Aircraft, and as project pilot for the unique S-72 Rotor Systems Research Aircraft. He was honored as a Fellow in the Society of Experimental Test Pilots in recognition of his impressive track record and contributions to flying.
Richard Hart  
Moog

Dick Hart is a native of Western NY. He graduated from General Motors Institute with a Degree in Mechanical Engineering. After graduation, Dick joined Moog in 1961 as a Product Engineer.

Dick was a hands-on engineer, providing direct engineering support to Assembly and Test technicians. During his tenure at Moog, Dick held varying positions of increased responsibility, including Product Engineering Manager and Manufacturing Manager.

As a Product Engineer, Dick made critical contributions to several projects involving technically challenging products, including thrust vector control (TVC) actuators for the 1.5 million pound thrust Saturn V first stage F-1 engines, flight control servo valves for the SR-71 requiring operation at unprecedented temperatures, and TVC actuators for the Space Shuttle.

His engineering skills were key in the process improvements for Moog’s 30 series servo valves. In 1977, Patent #4017706 was granted to Richard Hart and Richard Aubrecht for Electrical Discharge Machining (EDM) of assembled torque Motor Air Gaps.

Dick’s skill as a Product Engineering and Manufacturing Manager were demonstrated when he lived for 3 years in Baguio Philippines, managing the rapid growth of the site to become a high-volume machining and assembly & test facility. Dick’s management skills also helped the transition of the Torrance facility into the Moog family after it was acquired.

The development of Moog Baguio and the acquisition of Moog Torrance formed the manufacturing base that would allow Moog to support the significant increase in actuator deliveries to Commercial Aircraft and Business Jet customers. Dick’s career at Moog helped to secure its future as an internationally recognized supplier of motion control hardware.
Henry Heubusch  
Bell and Canisius

Henry Heubusch Joined Bell Aerospace Textron in 1951 after receiving his B.S. and M.S. degrees in chemistry and completing six years of varied experience in industry and on the Chemistry Faculty of the State University of New York.

At Bell, he specialized in propellant chemistry and led that department during the heyday of the Bell rocket era in the 1960s and 70s. In that role he designed, equipped and staffed laboratories for work on liquid and solid propellants and directed numerous programs dealing with the propellants used on such notable Bell accomplishments as Shrike, Rascal, Agena, and the Lunar Module Ascent Engine.

He holds five patents on novel solid propellants based on polymeric hydrazine salts, has a patent for manufacture of High Purity Nitrogen Tetroxide propellants, and a patent for cleaning stainless steel for nitrogen tetroxide service.

Mr. Heubusch was a long-time member of AIAA, achieving senior member in 1961 while it was still the American Rocket Society. He served as the chairman of the Niagara Frontier Section from 1977-78 and received the section’s Outstanding Aerospace Achievement Award in 1995 for “For the innovative analysis and solution of the titanium tank leakage problem of the Apollo Lunar Module Rocket Engine.”

In August 1984, Mr. Heubusch took early retirement from Bell and became incorporated as a propellant chemistry consultant, where his work remained very much in demand. He also joined the Chemistry faculty at Canisius College, where in a remembrance the department chair stated “I can say without question that our students received the best possible education in laboratory practices from Henry. He deserves every accolade we can offer his memory.”
A graduate of Buffalo’s South Park High School, Tom Lennon earned his aviator's license at age 18 and served in the Army Air Forces during World War II. He then began a 28-year career as photographer and cinematographer with Bell Aircraft Corporation, documenting for posterity some of the most memorable aerospace programs of the 50s through the 70s – an era in which there were many.

To film Bell’s legendary X-1 and X-2 rocket planes he flew “chase” – loose formation – in the back seat of accompanying jet aircraft to film the flight from the first moments as it dropped from the carrier aircraft. He also took many candid photographs of the pilots with the aircraft – most of the famous photographs of X-2 pilots such as Pete Everest, Iven Kincheloe and Mel Apt with the aircraft were taken by Tom Lennon. General Everest thought so much of Tom’s ability he made him the formal photographer for his biography, The Fastest Man Alive.

When Bell first demonstrated the capability of their automatic carrier landing system, he was there to record the event in the aircraft as it landed on the USS Kitty Hawk. As if carrier landings weren’t enough, when Bell demonstrated the performance of its Carabao hovercraft under Arctic conditions, Tom accompanied the vehicle and crew to Greenland and lived for a month in Camp Century, the U.S. Army base constructed beneath the polar ice cap.

He took or orchestrated most of the flying footage of Bell’s rocket belt, including designing and implementing a system for first person footage by the pilot forty years before the first GoPro camera. Lennon even had a short stint as test pilot, making the first successful flight of the tethered, cold-gas powered Small Rocket Lift Device that served as a proof of concept for the rocket belt.

Tom Lennon’s distinguished photography career is remembered in both the Niagara Aerospace Museum and the Smithsonian Institution in Washington.
Jeffrey Wynn
Kodak

Jeff joined Kodak in 1965 after graduating with an AAS degree from Alfred State College followed by his BS degree from Rochester Institute of Technology. His over 47-year career included many engineering positions in the design and development of complex optical imaging systems for NASA missions and reconnaissance satellite programs.

Jeff began his Kodak career by providing critical design improvements to the film handling system for the Lunar Orbiter program and environmentally testing flight units. On the now declassified Gambit-3 reconnaissance program, he provided an innovative design for the precise exposure control mechanism which extended the capability of the system. For the same system he also provided structural designs for the dual Satellite Re-entry Vehicle.

He managed the design teams developing the Chandra X-ray telescope including the congress-mandated x-ray testing of the largest mirror pair. He was the Chandra Program Manager during the assembly, integration and testing phase, delivering the telescope on schedule. Jeff was awarded the prestigious NASA Public Service Medal for outstanding leadership of the Chandra Telescope Program. Chandra helps scientists understand the structure and evolution of the universe.

As director of Image Collection Systems, he grew that business unit by winning two classified programs plus NASA’s James Webb Space Telescope Program with TRW. After retiring from Kodak, Jeff returned as a consultant throughout several acquisitions of the former Kodak division, now an integral part of L3Harris. He was an independent reviewer of the winning proposal for the GOES weather satellite Advanced Baseline Imager and worked on teams proposing missions for the 2010 NASA Decadal Survey leading to the Roman Telescope Program. He has been interviewed by the media, cited in articles, and co-authored several papers.
Past Hall of Fame Inductees


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

1990 – George T. Baltus, Francis P. “Pete” Bassett, Gregory Ductor, Dr. Alexander H. Flax, Edgar P. Rhodes, Roland Rohlf


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


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


2003 – Kevin R. Caffery, James N. Dittenhauser, George R. Ord, Robert D. Roach, Jr., William P. Suitor, Dr. Nicholas D. Trbovich


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


2013 – Dr. Donovan R. Berlin, Ronald E. Ciura, Robert W. Fausel, Thomas F. Leney, Craig M. Schmidt

2014 – Clive Affleck, Lee Carey, Richard Cummins, David Dunlap, Giles Hofmeyer, Albert Jircitano, Eric Ohmit, Edward Sing
2015 – Aurelius Chaves, Jr., Mark Davis, Otto Kohl, Edward W. Rupp, Walter J. Rusnak

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

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

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

2019 – 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 – 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 – James Bellaire, John Crassidis, Keith Havey, Ronald Parker, David Schaeffer

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

2024 – Edward Gribben, G. Warren Hall, Richard Hart, Henry Ph. Heubusch, Thomas Lennon, Jeffrey Wynn
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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
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.
This iconic photograph by Tom Lennon shows Bell X-2 #2, 46-675, with a collapsed nose gear after its first glide flight at Edwards Air Force Base, 27 June 1952. Bell chief pilot Jean “Skip” Ziegler is still in the cockpit. Ziegler was lost, along with crew chief Frank Wolko, on 12 May 1953 after an in-flight explosion of the X-2 while on a captive flight under the B-50 carrier aircraft over Lake Ontario. The badly damaged B-50 landed at Niagara Falls but never flew again.

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