



FAM 14

Prepared by the SAN FRANCISCO AERONAUTICAL SOCIETY

Summer 2013

A SPECIAL CELEBRATION

Often referred to as the Academy Awards of Aviation, the Living Legends of Aviation Awards is a prestigious black tie awards gala held annually in Beverly Hills in which the Legends of Aviation honor significant contributions to aviation.

Louis A. Turpen, President of the Aeronautical Society, who served as CEO of San Francisco International Airport from 1981 - 1995 and CEO of Toronto International Airport from 1995 - 2004 was inducted at the 2013 awards by the "Official Ambassador of Aviation"®, John Travolta.



Turpen, the first airport executive to be honored, joins a small but illustrious group that includes astronauts Dr. Buzz Aldrin, Neil Armstrong, Gene Cernan and Col. Frank Borman; business leaders including Sir Richard Branson, Edsel B. Ford, Paul Allen,

Bruce McCaw and Barron Hilton; actors including John Travolta, Tom Cruise, Harrison Ford, Morgan Freeman and Kurt Russell and fellow San Francisco Aeronautical Society board members, Zoe Dell Lantis Nutter and Jean K. Tinsley.

During his twenty three years as the Chief Executive Officer of San Francisco International Airport and Toronto International Airport Turpen was responsible for more than \$7.3 billion in airport capital redevelopment. Projects included a complete rebuild of the terminal complex in San Francisco taking place from 1979 to 1987, the planning, design, financing and initial construction of the new two million square foot International Terminal in San Francisco completed in 2000 and the completion in 2004 of a total redevelopment of Toronto-Lester B. Pearson International Airport to include two new runways as well as the replacement of 75% of airport terminal, cargo and maintenance facilities.

In Toronto his efforts included negotiating the terms of a 60 year lease of the Airport from the Government of Canada to the GTAA which commenced on December 2, 1996; simultaneously developing a strategic vision for the Airport Authority and directing the planning and design of a ten year \$4.4 billion (CAD) Airport Redevelopment Program completed in 2004. During this period he completed \$800 million in strategic acquisitions to support

the redevelopment of the Airport. In 2004 the airport was recognized as the most technologically advanced in the world and the GTAA was named one of the "Top 100" technology companies in North America. In 2006 the Airport was named the "Best Global Airport" by the Institute of Transport Management.



In addition, during his career, Mr. Turpen has been the innovator of a number of aviation programs including among others, the introduction of the first "street pricing" concept in airport retail (1981), the first airport counter-terrorism plan (1985) and the first comprehensive noise mitigation program (1987). In 1997, he led the first successful airport revenue bond offering in Canada of \$1 billion CAD, which was at that time the largest corporate financing in Canada's history.

Mr. Turpen holds a Civil Engineering degree from the United States Air Force Academy, a Masters degree in Business Administration and currently holds several Professional Engineering registrations.

Mr. Turpen was elected as a Fellow of the Royal Aeronautical Society in Great Britain in 1991 and in 1996 was honored by the City of San Francisco Airports Commission in the dedication of the Louis A. Turpen Aviation Museum at San Francisco International Airport. Mr. Turpen served as a member of the Airports Council International World Governing Board representing more than 1400 airports in 167 countries from 1999 through 2004. He has also served on the Board of Directors of the Airports Council International Pacific Region Airports from 1982 until 1995 and as its President in 1983, 1989, and 1993. Fellow Aeronautical Society board member, Peter Volny, on Mr. Turpens' award, "It is such an honor to sit on the board of the Society along side three Legends of Aviation who tirelessly dedicate their time to preserving the history of commercial aviation in the Pacific." The Society congratulates Mr. Turpen on this very prestigious honor.

FAM 14 is the abbreviation for the world's first transoceanic Foreign Air Mail route, which originated in San Francisco and linked the East and West by air. The *FAM 14* masthead photograph, on page one, was taken by Clyde Sunderland and shows the Pan American Airways' *China Clipper* over the city of San Francisco on November 22, 1935, departing on the first trans-Pacific commercial flight to Manila, Courtesy of Pacific Aerial Surveys.

2013 SFAS SCHOLARS

In 2012, the Society launched a scholarship fund in recognition of the historical contributions made by many legends of aviation. Scholarships were open to high school seniors attending public high schools in one of the following school districts: San Francisco Unified School District, San Mateo Union High School District, Jefferson Union High School District and Sequoia Union High School District. This year three \$1500 scholarships were awarded to each of three very deserving students. Their essays are reprinted here in FAM14.



Up Above the Clouds
Janel Harumi Kajisa
Burlingame High School

Janel Harumi Kajisa is a graduate of Burlingame High School and will be attending UC Berkeley in the fall.

She tightly grabs a hold of the yoke, controlling the plane as it soars through time, space and empty air. This air that we need to breathe, but she needs to truly live. Bessie

Coleman, born on January 26, 1892 in Atlanta, Texas, did not simply see an opportunity to fly, placed in front of her; she made an opportunity for herself. As a young, African American woman in a time of terrible prejudice against both the female gender and the African American community, she was thrown into a life of difficulty that she knew would take a severe and passionate motivation to break out of.

Bessie had a firm desire to make some impact on the world that would instill change. Fueled by her brother's encouragement – a World War I veteran, who had planted the idea of flight in her head – Bessie began her ascent to the top of her wildest aspirations. Denied from flight schools in the United States, Coleman refused to be thwarted. She decided to travel to France, where there was less discrimination, and more opportunity. After learning the French language, and raising funds for the journey, Bessie finally made it to the Somme, where she was able to earn her license at the Ecole d'Aviation des Freres Caudon at Le Crotoy, completing a ten-month course in only seven months. Finally, after much effort, persistence and hard work, on June 15, 1921 Bessie Coleman made history as the first black woman to receive a pilot's license.

Coleman, after returning to the United States, went on to perform shows in the air, making a name for herself as "the world's greatest woman flyer." The image that she created was one of power and respect, her signature outfit a military-style uniform that caused the world to look at this new icon in awe.

She utilized her life story as a mode of inspiring the masses, going on to give lectures in black churches, theaters and schools. Although Coleman was tragically killed in an accident in 1926, her memory lives on and thrives through the lives of the many people that she affected, instilling in them a power to take control of their dreams and make them into reality, whether on the ground, or miles up in the air.

Bessie Coleman was a hero. When the technology was developed allowing people to fly the huge mechanical beasts in the air, it was portrayed as the work of some scientific magic. The ability to fly a plane, held in it a power of technology and advancement. Bessie opened the doors of flight, ushering in a new generation of independent and ambitious pilots, and setting the stage for others to follow in her footsteps. If she could do it, so can I. Her efforts placed her above the clouds, for as high as she aimed, was as high as she was able to go. Bessie Coleman will forever be an aviation legend, carried through the hearts of those whom she inspired and changing the definition of equality in flight, not solely in the United States, but around the world.



Michelle Linh
Galileo High School

Michelle Linh is a graduate of Galileo High School and will be attending UC Berkeley in the fall.

The ocean always had a comforting effect: the waves crashing against the sand where it used to be played in, squawking seagulls being chased all about, the compelling

salt smell that still clung to your skin a day after. The air however, had a more profound effect: what if flying was really possible? The days of Otto Lillenthal were measured in his pioneer of aviation; it was during a time when innocence had been taken in the Franco-Prussian War and yet it was an age of experimentation.

Known as "The Father of Light" and "Glider King", German pioneer of aviation Otto Lillenthal laid the groundwork for flight possible today. He was prominently known to do successful gliding experiments that were well-documented, repeated, and publicized. Lillenthal's first glider was tailless, nothing more than a pair of wings. He tested this by jumping off a board. He then did some research on the flight of birds, specifically on storks, and created polar diagrams to describe the aerodynamics of their wings. By gathering this data, he

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Louis A. Turpen Aviation Museum

was able to further develop much more successful gliders; he made various attempts to improve the stability in the degrees of successes by creating biplanes that had a halved wing span and a hinged tail plane, similar to the flapping wings of birds. During his short flying career, he developed eighteen different models of his gliders over a span of 5 years. Fifteen of Lilienthal's gliders were monoplanes, three were biplanes. Each was a hang glider, controlled by the pilot shifting his weight rather than through using any active control surfaces. He also contributed to the development of heavier-than-air flight, where he created flights from a hill built near Berlin and the Rhinow region.

Reports of Lilienthal's flights became worldwide as the media publicized his experiments and flights in a positive light. It began to break the barrier that flying was nothing short of being dreamers and fools because it actually seemed possible to fly. On August 9, 1896, Lilienthal once again took his glider for flying in the Rhinow Hills. While his first few flights were very successful, reaching a distance of 250 meters more than normal range, his glider finally stalled on his fourth flight. Even though he tried to reestablish the glider by correcting its altitude through manual shifting, his maneuver failed; Lilienthal fractured his cervical spinal nerve from a height of 15 meters. After he was transported to a clinic, his last words to his brother Gustav were: "sacrifices must be made". And indeed, it has made a tremendous impact throughout the course of the century.

Beyond legitimizing attempts to conquer the air and his effective hang gliders often mimicked by others, Lilienthal made two vital contributions to the invention of the airplane. First, he showed by publication and example that mastery of flight should be accomplished in gliders. Then, he sparked a particular inspiration to the Wright brothers, both through his successes and failures. This paved the way for making aviation possible as others began to experiment through their own research. Just as Otto Lilienthal says, "To invent an airplane is nothing. To build one is something. But to fly is everything."

For more information about the SFAS Scholars Program, designed to support local high school graduates in their pursuit of a higher education, please visit our website at www.sfaero.org/scholars-program

SFAS LAUNCHING NEW WEBSITE

The Society is working on the design of a new and improved website and are looking for input from our members. If you have any suggestions or comments on what you would like to see in our new website please email us at info@sfaero.org. Our members are our greatest assets! Our launch date is scheduled for Fall of 2013.

THE SOCIETY EXTENDS OUR THANKS TO ALL OF OUR SUPPORTERS WHO HELP FURTHER THE MISSION OF THE SOCIETY

The mission of the San Francisco Aeronautical Society is to support the San Francisco Airport Commission Aviation Library & Louis A. Turpen Aviation Museum by: seeking donations to the collection, raising funds for acquisitions to the collection, promoting scholarly research within the collection, producing educational publications, lectures, and seminars, supporting educational outreach efforts of the Aviation Museum, identifying subjects for oral histories, sponsoring special exhibitions and events, honoring leaders in the world of aviation.

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A Flying Leap – The Montgolfier Brothers
Rachel Anne van Heteren
Aragon High School

Rachel Anne van Heteren is a graduate of Aragon High School and will be attending Northeastern University in the fall.

The hot air balloon is not the most practical method of transportation, the most widespread, or the most glamorous. The inventors of the hot air balloon, Joseph and Etienne Montgolfier, are not the most well-known, celebrated, or even successful people. However, through sheer persistence and creativity, they managed to create the world's first functioning flying machine that was capable of carrying a human.

The Montgolfier brothers hardly came from an exciting background. Their father was a paper manufacturer, and they, with their fourteen other siblings, lived out a fairly peaceful life in eighteenth century Viladon-les-Annonay, France. But Joseph, as well as Etienne, had some big ideas. Around 1777, intrigued by dreams of flying, and the many failed designs for flying machines that dotted inventing history, Joseph took a paper bag from his father's factory, and filled it with steam. His idea was a seemingly viable one: steam moves upwards, so could it not move an object upwards with it? What resulted was a mass of wet, pulpy paper, no closer to flying than it was when it was dry. Etienne too experimented with making a bag fly, using hydrogen gas instead of steam. This failed as well. However, the Montgolfiers carried on nevertheless, refusing to let their failures thus far disappoint them.

Success finally came in 1782, when the Montgolfiers managed to make a taffeta envelope filled with hot air float. This follows with the rules of physics: hot air rises, and when the rising gas is hot enough and dry enough, it can lift an object with it. However, the Montgolfiers were the sons of a paper manufacturer, with little to no understanding of physics. They believed that they had stumbled across a new kind of gas, which was lighter than air and could therefore make objects fly. What they dubbed "Montgolfier gas" was in fact only heated air. But whatever the name of the gas that made their balloon float, a year later, the Montgolfiers were still able to expand their idea until they constructed a life-sized hot air balloon, which they demonstrated in public on the fourth of June, 1783. However, for all that they had managed to increase the scale of their project, the Montgolfiers still did not entirely understand the science behind their creation. By 1783, they were under the impression that it wasn't the temperature of the air that caused the balloon to rise, but the amount of smoke. Naturally, they took this to mean that they should burn everything from rubber to their shoes in order to create enough smoke to make their balloon fly. Spectators no doubt did not appreciate the noxious cloud of black smoke coming from the 38 foot tall taffeta balloon, but the first demonstration of a working hot air balloon was a spectacle nevertheless. The balloon was soon flown at Versailles in front of the king, carrying its first passengers: a sheep, a duck and a rooster. By November of that year, a third iteration of the Montgolfier's balloon was piloted by two humans:

Jean-Francois Pilâtre de Rozier and Francois Laurent, Marquis d'Arlandes, and human flight had been achieved for the first time in history.

What makes the Montgolfiers remarkable is not the elegance of their creation, or their vast engineering knowledge, but the fact that they managed to change the world of aviation with merely a little luck, and lot of gumption. They may not have understood how they were making their balloons float, or realized that their large-scale design, which was tenuously held together with buttons and linen, wasn't the most practical, but the Montgolfiers still determinedly worked through prototype after prototype, not letting setbacks or confusion stop them from achieving their goal. There is a story of perseverance and enthusiasm for flying that still inspires today.

SOCIETY MOURNS PASSING OF LONGTIME DIRECTOR MARION DAVIS WRIGHT



Wright Brothers' family ambassador and longtime Dayton-area volunteer Marion Davis Wright passed away May 16, 2013 in Toledo after a long illness. Wright, 85, was the widow of Wilkinson "Wick" Wright the great-nephew of Wilbur and Orville Wright. She was predeceased by her husband Wick.

Wright was teaching at The Miami Valley School when friends introduced her to "Wick" on New Year's Eve 1973. It was the beginning of a 25-year marriage and a love story that endured until Wick's death in 1999. Wright was undaunted by her husband's famous family. "How lucky am I? I married the most wonderful man in the world, and he came with this wonderful family history," she said in a 2003 Dayton Daily News interview.

Wright was a passionate volunteer during her 60 years in Dayton. She was a docent at the Dayton Art Institute, a Girl Scout leader and she held board positions at The Wright State University Library, The Dayton Literary Club, The Aviation Hall of Fame and the San Francisco Aeronautical Society. "She was a flower that always gave such a sweet aroma to those around her," Rhine McLin, former Dayton mayor and a member of the Montgomery County Board of Elections said.

Wright was born January 2, 1928, the only child of Beatrice Louise Green and George Cameron Davis in Durham, N.C. She graduated from Duke University in 1949. Wright is survived by daughters Martha Sullivan, Barbara Cutillo (Daniel), Anne Pierce (Max), step-children Amanda Wright Lane (Donald) and Stephen Wright (Debra), and 10 grandchildren.

After Wick died, Marion became an ambassador for the family, but she was always trying to shift the spotlight onto his children. "By having the service at Hawthorn Hill, we're saying 'she is a Wright.' She has earned those stripes," Lane said.

EXHIBITION HIGHLIGHT: United We Stand: Female Flight Attendant Uniforms of United Airlines April 2013-September 2013

True to its name, United Airlines was originally formed by a merger of four companies whose roots go back to the beginning of commercial air transport in the 1920s. National Air Transport, Pacific Air Transport, Boeing Air Transport, and Varney Air Lines were organized in 1931 under United Air Lines, Inc. By 1934, all four subsidiaries had been fully absorbed into a single company operating as United Air Lines, which became the major carrier on the San Francisco–Chicago–New York route known as the “Main Line.”

Male employees had served as cabin stewards on a small number of airlines in the 1920s. The first female cabin crewmember, Ellen Church, was hired by Boeing Air Transport at its San Francisco office in 1930. She in turn hired seven more women and created the “stewardess” profession. In the 1970s, the term “flight attendant” came into use for both male and female cabin crew.

Throughout the decades, United’s cabin crewmembers were issued a range of distinct uniforms. This carefully selected company attire was designed to project confidence and professionalism in the early years and to celebrate the fashionable nature of air travel as the industry grew into the Jet Age. True to its name, United Airlines was originally formed by a merger of four companies whose roots go back to the beginning of commercial air transport in the 1920s. National Air Transport, Pacific Air Transport, Boeing Air Transport, and Varney Air Lines were organized in 1931 under United Air Lines, Inc. By 1934, all four subsidiaries had been fully absorbed into a single company operating as United Air Lines, which became the major carrier on the San Francisco–Chicago–New York route known as the “Main Line.”

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The United Airlines Historical Foundation recently made a donation to SFO Museum of an entire collection of flight attendant uniforms dating from the 1930s to the present. Eighteen female uniforms from the collection were selected

for this exhibition including ensembles created by Raymond Loewy, and the fashion houses of Ben Reig, William Travilla, and Jean Louis; many with hats made by famed milliner Mae Hanauer.

The United Airlines Historical Foundation is a non-profit organization dedicated to the preservation of the airline’s historic achievements in commercial aviation. Visit www.uahf.org for more information.



United Air Lines stewardess uniform 1968–1970

Designer: Jean Louis

Uniform by Fashionaire, a Division of Hart, Schaffner & Marx

Hat by Mae Hanauer

wool, vinyl

SFO Museum

Gift of United Airlines Historical Foundation

Hat insignia: Gift of Georgia Panter Nielsen

Jean Louis of Hollywood came to United with a vision to clothe United’s 4,500 female cabin crewmembers in the latest ‘60s fashions. His simple and elegant A-line skimmer dress of double-knit wool came in four combinations of the colors named “Hawaiian Sunset,” “Maliblu,” and “Miami Sands.” The kepi-style cap in either white vinyl or the Hawaiian Sunset color fabric completed this popular uniform.

CURRENT EXHIBITIONS
Louis A. Turpen Aviation Museum

**The Douglas DC-3: Legacy of an
Airline Legend**

May 4th, 2013 – November 17th, 2013

**United We Stand: Female Flight Attendants
of United Airlines**

April 2013 – September 2013

China Clipper
Continuous

**Ascent to the Air Age: Aviation Literature
for Young Readers, 1910–1950s**

March 2013 – September 2013

**Women at Work: The World War II Aircraft
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September 2012 – April 2013

Hours of Operation

No admission charge, open free to the public.

10:00am to 4:30pm Sunday through Friday.
Closed Saturdays, Holidays, and during private events.

CONTACT! For Society general membership and other programs, please contact:

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The San Francisco Airport Commission Aviation Library and Louis A. Turpen Aviation Museum is located at San Francisco International

Airport, International Terminal, Pre-Security, Level 3. It is open Sunday - Friday from 10:00 am to 4:30 pm. The telephone number is (650) 821-9900. For additional information and to learn about volunteer opportunities, please contact the SFO Museum at (650) 821-6700, or email curator@flysf.com or visit www.sfoairport.com.

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