Ward Van Orman
Inducted into the U.S. Ballooning Hall of Fame on July 29, 2018
By the Balloon Federation of America at the
National Balloon Museum in Indianola, Iowa
Welcome to the story of an extraordinarily gifted individual whose passion, compassion, and motivation to make our world a better place is a centerpiece to this great American aviator, inventor, and philanthropist.

Early years -
Van's story began September 2nd, 1894 in Lorain, Ohio where he was born to parents Richmond Guinnete and Christina Van Orman. From an early age it was apparent that young Van had a passion for engineering various things. He and his father, a bright mechanical machinist, spent many hours repairing their first automobile an "Auto Car". It only had two cylinders and needed numerous repairs but it got the family around.

Van's early introduction to mechanical engineering experiences with his father furthered his passion for mechanical science. Van worked hard and saved as much as he could of his $40 a month salary from working at the railroad in Lorain, Ohio and attended college at Case School of Applied Science in Cleveland, Ohio. During his junior year of college, Van met his first love, Edith Lucille Black. Van and Edith married the following year.

After graduation in 1917, Van followed a close friend to Goodyear Tire and Rubber and was hired June 6, 1917. Van was highly experienced by then with motors from his college days, where he worked part time at Willy's Overland company, which served as valuable knowledge to Goodyear's aeronautical division and their lighter than air dirigibles. Soon Van became a valuable resource for Goodyear and shortly managed the installation of motor plants in aircraft. With his growing knowledge of Airships, Van became one of the key engineering designers for the two largest airships ever built, the Akron and Macon.

Global attention on ballooning championships created talk at Goodyear Aeronautical that year on how to bring the Gordon Bennett trophy back to America. Championship ballooning in the early 20th century had become very popular and there was pressure from the President of Goodyear, Paul Litchfield to dominate the sport. That year was 1918 and Van got his first Ballooning license.

"I passed my test"-
In 1919, Van got his first big break in what would be the start of an amazing ballooning career. Ralph Upson, chief aeronautical engineer of Goodyear and a highly regarded International and National Ballooning Champion asked Van to be his aide in the upcoming 1919 National Balloon race out of St. Louis, MO. Their efforts produced a National Championship that year as well as a third place finish in the 1920 National Championships.

1921 was the beginning of a new era for Ballooning. Ward T. Van Orman began his great career piloting his first of many National and International Championship victories. In all, Van piloted his balloon to four National and three International Championships over the next 10 years. His accomplishments have never been equaled.
1932 was a tough year for Van. His beloved Edith died from the flu/pneumonia and left Van to raise his three young children, Edith, Ward, and Jim. He also lost his dear friend and aide Mort in a ballooning accident a few years earlier. However, the Chairman of the Board of Goodyear Tire, Paul Litchfield, felt the United States Ballooning team needed to bring Van out of retirement and participate in the 1933 Gordon Bennett Race in Chicago that year. Van said no thanks, but "You don't get very far with a no thank you with the Chairman of the Board of a large rubber company!" With a gift of two bottles of King George IV Scotch and a healthy Life Insurance Policy courtesy of Mr. Litchfield, Van reluctantly agreed to lead his team.

That year, five foreign teams would battle to break America's six year winning streak. Three veteran American teams would compete to continue the streak. Van brought along his eager young aide, Frank Trotter, who had several years of experience in previous balloon races.

Weather was less than ideal. Unsettled weather conditions worsened by stiff southwest winds accompanied their start. Their trip took them rapidly north over Lake Michigan toward a temperature inversion they hoped to catch over Lake Superior but unfortunately their balloon crashed suddenly into the waves of the lake and they struggled to gain elevation. Their sandbags got saturated with lake water and they seemed trapped on the surface of Lake Michigan.

"My aide Totter yelled – “Van, this is a horrible way to fly! I hope you know what you're doing!”'  
'Van yelled back – “I assure you I know what I'm doing but sometimes it doesn't always turn out right.”'

It took them over an hour of fighting the waves and wet sandbags until they finally gained altitude and soared 15,000 feet into a winging 50 mile an hour wind current. Unknown to them at the time this was the easy part of the race!

"Oh it was so nice to have land, rivers and trees under them now" Van said as they sailed towards Quebec. As they sat gloating, Van noticed to the west a nice juicy snowball cloud coming towards them. It was a cumulous cloud and testing it with his radio it turned out to be a thunderstorm. They tried immediately to find a faster current, but to their dismay they were in the fastest current available and could not pull away from the force that was upon them.

Then things got worse and worse. Suddenly the squall came with a roaring rush. Van - "We had never seen a balloon act as ours acted not even in the Pittsburg race of 1928."It hit us while we were high up and we careened all over, bounced all over." Van said that if he had been in the center of that storm he was sure they would have been dead at the start. As it was they figured they were probably done for!
They fought the storm for 6 hours before giving ground, Frank screamed at Van through the storm, "Van you CAN'T land! I won't let you." Well I was in command Van said and he proceeded to try to land the balloon safely. At that point they were traveling at 55 mph and they used their drag rope, hoping the tree tops would slow them down. The first 20 inch tree they hit snapped in two! Five more trees broke before finally snagging their envelope on the sixth tree and swinging in a circle. As their daze wore off, they realized they were stuck 25 feet above the ground. To their benefit the deflated gas bag had draped over the gondola like a tent. The two of them were dripping wet, and glad to be alive. That night they slept in their elevated fortress and waited for daylight.

The next day reality set in, they were in chest high underbrush, in the Timagami Provincial Forest. In other words, the wilds of Northeastern Canada, 26 miles from the nearest public access, a railroad. They knew two things, everyone was looking for them and second, they would have to save themselves by getting to the railroad. At best they could only hike through the razor-sharp underbrush in limited progress. It rained every night with such abandon in the woods that they were not dry a moment of that duration. Van knew it would take 14 days to reach the railroad.

Could it get even worse? -
At the beginning of their second week the two aviators were overcome by ptomaine poisoning. Each day thereafter they lost more and more limited energy. Most of everything they needed to survive had been lost overboard in the storm. The two of them got to the point where they had to rest an hour to just go a city block. Van’s motivation- "The faces of my children rarely left my mind. Frank and I already had been through high water and more than a touch of hell. I vowed to myself over and over that I would tolerate nothing but return to my children."

Paradise - "Then there it was, the most beautiful site" - Van found a high tension power line. They wanted to chop it down but didn't want to die trying, but fortunately running parallel was a telephone line. Van knew that if they could chop it down then the authorities would have to send a repairman out to fix it. Thirty minutes later, using the one tool they salvaged from the balloon basket, an axe, they severed the line. The two left a note explaining who they were and said they would continue to follow the power line south.

Finally luck was on their side. Two miles further, Van and Trotter came across a shelter hut for the repairmen to stay in while in the woods. To them it looked like a 5 star hotel! Trotter broke the lock off and the two were finally treated to the lap of luxury; a stove, blankets, and food. For the first time in two weeks, they were warm and dry.

Orders were issued at the Power Company to find and correct the telephone outage, as Van had predicted. Meanwhile all hell was breaking loose in the states over the lost two balloons; Van's and the Polish balloon. The Army, Navy, and Coast Guard were called in as well as the Canadian government. The popular notion was that the two teams were swept out to sea.
Saved at Last -
Within a couple of days, in walked a tall six-foot Canadian repairman, his greeting, according to Van "What the hell are you fellows doing here?" Van explained who they were and the fellow said "My God! You're them! Everybody in Canada has been looking for you!" Van said "Oh that is something!" Soon the whole world found out that their beloved balloonist and aide had indeed survived and would be heading home.

In a matter of days, Van and Frank were reporting their experiences to the world over the combined networks of the British Broadcasting Company and the National Broadcasting Company.

Van's final quote about the race- "It was finished and I would never race again."

His Great Aides-
Van's successes as a ballooning champion would not have happened if it was not for the help of the several aides (co-pilots) that helped him throughout his ballooning career. For their service, dedication, and amazing love for ballooning, we say thank you for your support of Ward T Van Orman:

1921 - Mr. W.P. Seiberling
1922 - Mr. W.W. Morton
1923 - Mr. Herbert Thaden
1924 - Mr. C.K. Wollam
1925 - Mr. C.K. Wollam
1926 - Mr. W.W. Morton
1927 - Mr. W.W. Morton
1928 - Mr. W.W. Morton - Van's Balloon is struck by Lightning. Morton died
1929 - Mr. A.L. MacCracken
1933 - Gordon Bennett Championship - Frank Trotter (Van's final race, lost in Canada)

Friend Morton is struck dead-
We would be remiss not to point out the ultimate sacrifice Mr. Morton (Mort) had made in the 1928 National Championship race out of Pittsburg PA. Two hours out of Pittsburg, Van and his dear friend and aide, Mort, were in a battle for their lives, fighting a major thunderstorm. Their balloon bounded up and down several thousands of feet in seconds, when at 3000 feet their balloon was struck by lightning. The lightning strike exploded their balloon in a gigantic, exploding flash and caused it to plummet to the ground in a rapid decent. All was blacked out in seconds. Five hours later, Van came to and saw the horror he was trapped in.

Van's dear friend and frequent aide in many ballooning championships was struck and killed by a lightning bolt. He died as they both struggled to gain control of their run away balloon. Van survived although he was injured with a broken ankle. But Van's greatest injury was much more severe, he had lost his dear friend and most trusted ballooning aide. Even 50 years later, to his dying day, Van never forgot that day and the loss of a dear friend!
Van's contribution to Humanity -

"During my Goodyear years, I enjoyed a whole spectrum of experiences and I am still asked, which was more of a thrill to me personally - ballooning or research? It was a difficult question to answer. From an adventure standpoint I loved ballooning. From a completely professional view, I was tickled to have been part of the development of many exciting projects that helped save lives and serve humanity." Ward T. Van Orman

Making Ballooning Safer -

Van strived to make ballooning safer for all balloonists throughout his career. Some of his key inventions included:

- Inventor of the lightning arrester
- Inventor of landing pontoons for balloons
- Inventor of a protective canopy for balloons
- Inventor of a new method of processing balloon fabric
- Inventor a new Alarm Altimeter
- Inventor of a new type of vertimeter and a special balloon fabric.

Other key Inventions -

1918 - Inventor of the Rubber Life Raft
1919 - Inventor of Bullet-Sealing fuel tanks for military aircraft
1928 - Inventor of the fabric process
1933 - Inventor of a new method of measuring vibration of the front wheels of automobiles.
1938 - Inventor of the air-conditioned cast for orthopedic cases.
1942 - Inventor of the airtight zipper
1942 - Inventor of the Stratosphere Pressure Suit - (First Space Suit)
1943 - Inventor of Hyperbaric Oxygen Therapy
1947 - Inventor of a breathing machine for heart patients
1947 - Inventor of a new process for Braille study for the American Red Cross
1947 - Inventor of the pulsating pressure pad for the prevention of bedsores
1949 - Developed the self-charging electrostatic air cleaner.

Highlights

- World Champion Pioneering Balloonist, World Acclaimed Inventor, Engineer, Philanthropist, Husband, Father, Grandfather and Great Grandfather. Considered by many in the sport to be one of the greatest champion balloonists in history and an “Old School Gentleman.”

- Born September 2, 1894 Lorain, Ohio
- Died March 11, 1978 Akron, Ohio
- Preferred nickname – “Van”
- 2018 Marks the 100th anniversary of Van becoming a licensed Balloon Pilot.
- Licensed Balloon Pilot, Licensed Airship Commander, and Government Instructor in Free Ballooning
- Van competed in 11 National Championships - Winning 5 times, second twice, third twice.
• Van competed in 10 International Gordon Bennett World Championships – Winning 3 times, second once and third twice.

• It was well known in early championship ballooning that you had to be willing to die in order to win the Gordon Bennett Trophy. Van was in 10 of these races, won 3 of them and nearly died twice trying to win!

• Favorite Quote – “I have loved the stars too fondly to be fearful of the night”

• Inventor of over a dozen major inventions that served humanity and saved many lives.

• Recipient of the Prestigious Case Alumni Association Gold Medal Award for 1977.

Van was quoted as saying "I like to think that my international free ballooning was the command post for my science experimentation"

Van retired from Goodyear Tire Company in 1962. These 45 years were his favorite part of his adventurous life!

Autobiography - As told by Rick Dunn - Grandson of the Great Ward T. Van Orman
In Memoriam

World famous aeronaut Ward Tunte Van Orman, known most recently for his emotional presentation as the keynote speaker at last summer's Reno Convention banquet, died in Akron, Ohio this past March 11th at the age of 83.

Van, an honorary life member of the BFA, was born to Richard and Guinette and Christina Tunte Van Orman on September 2, 1894 at Lorain, Ohio. Through high school he worked as a toolmaker, earning five cents an hour at first and eventually 40 dollars a month towards his college tuition. He was educated at Case Institute of Technology where he received a Bachelor of Science degree (with a straight-A record) in Mechanical Engineering in 1917, a Master of Science degree (with a thesis on airship design) in Mechanical Engineering in 1929, and a Citation of Honor in 1935.

In 1917, Van accepted a job at Goodyear at Wingfoot Lake. During the First World War he instructed naval officers in aeronautics, navigation, and meteorology. On April 13, 1918, he married Edith Lucille Black who later died of pneumonia. Their children were Edith Tunte, Ward George, and James Richmond. Also in 1918, Van earned his free balloon and airship pilot licenses.

In 1919, Van was Ralph Upson’s aide in the National Balloon Race. They won. The following year, Upson and Van Orman placed third in both the Nationals and in the International Gordon Bennett Race. In 1921, Upson and Van Orman were competitors in the Nationals instead of partners. Upson won and Van Orman, with W.P. Selberling as his aide, placed third.

In 1924 and 1925, Van Orman, with his aide Carl K. Wollam, won the Nationals, but did not place well in the Gordon Bennett races in those years. In the 1925 Gordon Bennett Race, Van Orman and Wollam did the impossible — landing on the deck of a German freighter at sea in the middle of the night — a feat never before accomplished. In 1926, Van Orman, with Walter W. Morton as his aide, won both the Nationals and the Gordon Bennett Race. In 1927, he and Morton again won the Nationals and placed second in the Gordon Bennett Race. In the 1928 Nationals, their balloon was struck by lightning near Greensburg, Pennsylvania, killing Morton, wrecking the balloon, and injuring Van Orman.

Van was the first to apply celestial navigation to balloon racing, using the radio compass and the mariner’s sextant as navigation aids. These position-finding devices helped to make victory possible. In 1929, Van was back, with A.L. McCracken as aide, and took second in the Nationals and first in the Gordon Bennett Race at St. Louis, landing in his home state of Ohio. They repeated the victory in 1930 at Cleveland. There was no 1931 Gordon Bennett Race due to the Great Depression, but Van placed second in 1932. A few weeks later, having returned from Europe via the Graf Zeppelin, his wife Edith, who through the years was the unsung hero of Van in both success and failure, passed away.

The 1932 Gordon Bennett Race started during the Chicago Exposition but it was a different Van, with more doubts than ever before. From his expert knowledge of weather came the somber and prophetic warning that race entrants had better be prepared for getting lost in the Canadian wilds. Ironically, Van and his aide Frank Trotter crashlanded during a midnight storm in the dense pine forest of northern Ontario. After a cold wet night in the Goodyear's BX’s battered basket, still swinging from a tall pine, the two men picked up what they could find of their supplies, and started hacking their way toward a railroad that Van thought passed 18 miles south. To help cheer them up, Trotter later reported that Van kept wheezing away on the harmonica — “Ah, Sweet Mystery of Life.” A crushed can of beans gave both men pomegranite poisoning, making Van desperately sick. The plowing through hedge-thick brush was nearly impossible and the aeronauts seemed to be headed nowhere. The insistent harmonica tune weakened silence — and the mystery, to Van, became:

What was the father of three motherless children doing in this crazy business? They found a telephone line — cut it — and were finally rescued by a repair crew looking for the break. Although no longer important, Van placed third in that 1933 race. But he put aside ballooning for the next twenty years, climbing into the basket only a few more times in the 1950s.

After 45 years as an engineer with Goodyear Tire and Rubber Company, Van retired in 1962. While there, he was credited with a string of inventions: life rafts for overseas flights — 1918; bullet-sealing fuel tanks for military aircraft — 1919; crash-proof tanks for transport aircraft — 1919; fabric processing — 1923; new method for measuring front wheel vibration in automobiles — 1933; air-conditioned cast for orthopedic patients — 1938; air tight zipper — 1942; stratosphere pressure suit — 1942; hyperbaric oxygen therapy — 1943; breathing machine for heart patients — 1947; new process for Braile study for the American Red Cross — 1947; and self-charging electrostatic air cleaner — 1949.

On July 29, 1950, he married Bernice Evelyn Davis of Akron. In 1971, he was awarded the LTA Society’s Achievement Award in recognition for his lifetime of contributions to ballooning and humanity. He was an honorary life member of the International League of Aviators, the LTA Society, and the Balloon Federation of America. All told, Van won five of the eleven National Races that he entered and four of the ten Gordon Bennett Races that he entered.

In triumph and in tragedy, Van’s life was full of drama and excitement. It is perhaps true that those who are most inventive are most likely to win. As a fellow engineer and as a fellow balloonist, Van was a winner — and he will be missed.

— Dick Brown, Editor