

Quality of Life is the Theme at 2005 Lindbergh Award Event

Improving the quality of all life on Earth is a basic element of the Lindbergh Foundation’s mission. At the May 21, Lindbergh Award event at the Minnesota History Center in St. Paul, Minn., Yolanda Kakabadse and Dr. Bertrand Piccard discussed ways that individuals can make a difference in the quality of life on our planet.

Kristina Lindbergh talked about freedom as she introduced the 2005 Lindbergh Award recipients. But not the kind of freedom we are accustomed to thinking about. Instead, she pointed the audience toward Annie Dillard’s book *Pilgrim at Tinker Creek*, in which Dillard describes freedom as “the world’s water and weather, the world’s nourishment freely given, its soil and sap...”

A silver bas-relief medal of the *Spirit of St. Louis* flying above the Earth was the symbol for this year’s Lindbergh Award. It was created by sculptor Don Wiegand and donated by The Wiegand Foundation. Upon accepting the 2005 Lindbergh Award, Ms.



l-r: Chairman of the Board Rusty Whitley, Vice Chairman Kristina Lindbergh, Dr. Bertrand Piccard, Yolanda Kakabadse, and Vice Chairman Erik Lindbergh.

Kakabadse charmed the audience with her first thoughts as she received notification that she was to receive the award. “I thought at first it was recognition for all the mileage I have in my travels,” she said laughing. “But it was something much more than that.”

Awardees, continued on page 3

Burt Rutan Inspires Crowd at “Legends of the Sky” Event



l-r: Burt Rutan, Dr. Bertrand Piccard, Martha King, John King, Erik Lindbergh and Greg Herrick have an opportunity to get acquainted before the program started. They are standing in front of Herrick’s 1929 Kreutzer “Air Coach” K-5.

Aviation enthusiasts filled the Golden Wings Museum at the Anoka County Airport on Friday, May 20, at the Lindbergh Foundation’s “Legends of the Sky” hangar party hosted by the Golden Wings Museum. The Foundation’s first major event in Minnesota in 20 years enabled 350 aviation

fans and Foundation friends to gather to hear stories of history-making aircraft and their pilots, and mingle among the vintage airplanes from the Golden Age of aviation, and several of aviation’s living legends as well.

The witty and folksy style of MCs **John and Martha King** was warm and inviting. They made aviators and landlubbers alike feel welcome as they described the pilot’s unique view from the air – the basis upon which the Lindbergh Foundation was established.

Erik Lindbergh, vice chairman of the Foundation and grandson of Charles and Anne Morrow Lindbergh was the host for the evening. Erik’s graciousness was tangible as he thanked everyone for attending.

Greg Herrick, one of the nation’s preeminent collectors of Golden Age aircraft and a recognized leader in the aviation community, told a hair-

Hangar Party, continued on page 4

Inside

Flight Lines	2
Lindbergh at Mayo	6
2005 Grants	7
Earth Shine News	10
Director News	12
Annual Report	13
Honor Roll	15
Volunteers Needed	16

Notems

Charles A. Lindbergh Historic Site

Nov. 26 & Dec. 3 Holiday Open House – The year is 1917 and the Lindbergh's are spending Christmas in their Minnesota home. The house will be decorated in Christmas style with Evangeline Lindbergh hosting the event. Mrs. Stevens, the tenant farmer's wife, will be serving Mrs. Lindbergh's guests, as well as giving tours of the Lindbergh home. 10 a.m. to 5 p.m.

“Spirit of Goodwill” Tour Planned

Inspired by Lindbergh's New York-to-Paris flight, Theodore Gildred, Sr., embarked upon a 4,200-mile flight from San Diego to Quito, Ecuador in 1931 in his Ryan B-5 Brougham named *Ecuador*. The flight lasted 18 days and made 13 stops. Fifty years later, Gildred's son, Theodore Gildred, II, re-created his father's flight in a 1942 Stinson Reliant, calling it *Ecuador II*. The “Spirit of Goodwill” tour will be re-created again starting March 13, 2006, as Ted Gildred, Jr., commemorates the 75th anniversary of the original flight in his turboprop Pilatus PC-12 named *Ecuador III*. A celebration is planned for Feb. 18, 2006, at the San Diego Aerospace Museum.

The Spaceship Company is Launched

On July 27, Sir Richard Branson, founder of Virgin Group of Companies, and Burt Rutan, President of Scaled Composites, announced their agreement to form “The Spaceship Company” to build a fleet of commercial sub-orbital spaceships and launch aircraft. “I am very excited to have agreed [on] the terms on which we can now move forward to develop the world's first commercial, passenger-carrying spaceships,” said Rutan at EAA's AirVenture celebration in Osh Kosh, Wisc. The Spaceship Company, jointly owned by Virgin and Scaled Composites, will own the designs of the SpaceShipTwo (SS2) and White Knight Two (WK2) launch systems now being developed at Scaled Composites, and will contract with Scaled for the research and development, testing and certification, with Rutan leading the technical development team.

Flight Lines

History Detectives Prove Builder of “Spirit of St. Louis” Engine

A trio of young men, kids really, were involved in one of the most celebrated aviation achievements in history. In a recent episode of the PBS program “History Detectives” it was proven that the man behind the Wright Whirlwind J-5C engine in the *Spirit of St. Louis* was a young engineer named Tom Rutledge, a 24-year old flyer and a recent graduate of Newark College of Engineering.

The “History Detectives” investigator contacted **Nova Hall** at the Donald Hall Foundation for help. Hall's grandfather was Donald Hall, who was just 29 when he re-designed the plane that became the *Spirit of St. Louis*. They also visited **Kermit Weeks** at the Fantasy of Flight Museum, and met with **Jeremy Kinney**, a curator from the Smithsonian Institution's National Air and Space Museum.

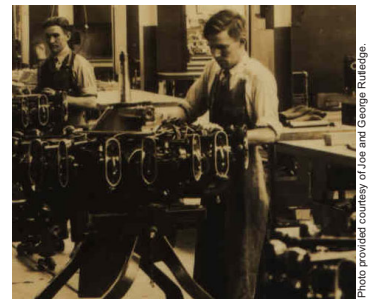
Rutledge's nephews, Joe and George Rutledge held a letter dated May 25, 1927, from G. W. Vaugh, Vice President at Wright Aeronautical, acknowledging Tom's involvement with the Lindbergh engine, a few photographs, and numerous stories told by their father and uncle as their only hard evidence. But nothing more would be needed. For Jeremy Kinney, the fact that Tom Rutledge received a letter acknowledging his role in building an engine was remarkable in and of itself. That the letter was dated just four days after Lindbergh's New York-to-Paris flight was also significant. Combined, the letter and photographs were proof enough for Kinney that the Rutledge's family stories were indeed true.

In 1927 Wright Aeronautical had the honor, and the challenge, of having its engines in each of the three planes vying for the \$25,000 Orteig Prize, which would go to the first person to fly non-stop from New York to Paris. According to Lindbergh, the corporation maintained “strict neutrality” and the Byrd, Chamberlin and Lindbergh planes each received the best possible service and workmanship. Joe Rutledge said his uncle remembered several orders in February 1927 with “zero tolerance” specifications, meaning the engines were to be made with the highest possible standards. Up to this point, all the engine orders had been for military aircraft, making these the first private engine sales. All the assemblymen did their best to make sure those engines didn't fail. Three engines were for Admiral Byrd's Tri-motor and one was for Clarence Chamberlin's *Bellanca*. Tom Rutledge was assigned to the Ryan job.

“My uncle was crestfallen,” said Joe Rutledge. “He really wanted to build Chamberlin's engine because he had served as sort of a ‘ground jockey’ or ‘gopher’ for Chamberlin during earlier days in northern New Jersey and Long Island. Since my uncle was the youngest and least senior of the six engine builders at the time ... he was assigned to the Ryan effort.” On the CharlesLindbergh.com web site Joe Rutledge wrote that the shop superintendent, seeing the disappointment on his uncle's face, told him, “take a little extra care with this one Tom, some fella out in California wants to fly it to Paris.”

Tom Rutledge continued to work for Curtiss Wright through the 1940s. He was a pilot with 1600 hours in his log, a flight instructor, and met numerous aviation heroes during his lifetime, including Lindbergh and Amelia Earhart. He was invited to train Canadian pilots for the Royal Air Force during WWII, but respectfully declined because he was inclined to airsickness when new pilots made erratic moves during flight training.

Today, Joe and George Rutledge remain enormously proud of their uncle and the incredible part he played in aviation history. This story completes a circle. Three young men – Donald Hall, Tom Rutledge and Charles Lindbergh – representatives of American ingenuity, pride in workmanship and a pioneering spirit, who are now forever linked to the treasured little silver plane – the *Spirit of St. Louis*.



Tom Rutledge assembles a Whirlwind engine, ca. 1927. “He must have been extremely competent to be an assembler at the age of 24,” said nephew George Rutledge. “Most of the senior assemblers were in their 40s or 50s.”

Awardees, continued from page 1

Not a scientist, Ms. Kakabadse says she is thrilled to be working on behalf of the environment and for sustainable development. She coordinated the participation of society in the 1992 World Summit on Sustainable Development held in Brazil. But she is most interested in policy-making. “How can I use the information that



is available around the world to move the decision makers into policies that will change something – even if it is a little thing – an ecosystem, or a species, or a trend, that affects the quality of life of the human being?” That is the question. She agrees that science and technology is essential for achieving sustainable development. Yet, conflict is inevitable. Using Ecuador as an example, Ms. Kakabadse

showed a map of the “green areas” in her country. She then overlaid another map that illustrated the locations of many valuable natural resources, such as oil, and minerals. Most of the highly valuable resources are located in the protected areas of her country and this, of course, results in conflict. “How do you deal with policies, conservation and goals if they are all overlapping?” she asked. “Conflict is part of life. Conflict should not stand in your way. The challenge is to seek out solutions.”

Renowned for her creativity in resolving conflicts between industrial and environmental interests, Ms. Kakabadse ended a long-standing and violent dispute over the border between Ecuador and Peru by helping to establish a peace park between them. She also used her skills in mediation between environmental groups and an oil pipeline company, which resulted in more conscientious industrial practices and the establishment of a \$17 million environmental trust fund. Clearly relationship-building is vital to this kind of success. While serving as president of The World Conservation Union, she urged world leaders and policy makers to look at globalization ethically – to consider that most diners at Tavern on the Green in New York City, for example, cannot possibly imagine how eating their shrimp salad might impact a mangrove forest in Thailand. “Building relationships between societies, culture, and nations requires a global effort,” says Kakabadse.

She also discussed that knowledge and information is crucial in managing the political processes. With good research, good decisions can be made. She cited a recent problem with sharks near the Galapagos Islands. The sharks that live in that area are becoming threatened because their fins are a delicacy in Southeast Asia. Fishermen cut off the fins and throw the rest of the body back into the ocean. While this practice is illegal, one month’s work can sustain a fisherman’s family for an entire year. The problem is made worse by the lack of information about the species, its behaviors, numbers, reproduction habits, etc., so that perhaps some limits could be established for this type of farming, and possibly some other uses for the body of the shark could be identified.

The research that Ms. Kakabadse described represents the type of project that is funded by the Lindbergh Foundation’s

August 2005

Grants program. Her example demonstrates the importance of this type of work to our global community. It is critical, she says, to “define together the scientific agenda in order to see that the results are a tool for decision-making for the sustainable development of the country” and not a tool for one special interest group to use against another.

During a recent visit to Japan for the world exhibition entitled, “Nature’s Wisdom,” Ms. Kakabadse was overwhelmed by the fantastic multimedia presentation on behalf of conservation. The event turned into a “visual stimulus for the mind, and for the heart, and for your emotions, and made you react immediately about how you, as a human being, could influence the state of the world today,” she said. “People who visit such places, get information and acquire knowledge about what is going on with natural resources around the world, and witness the tremendous damage that is being caused in some parts of the world as well as the positive changes happening around us – only then do you become an active member of society.”

As she closed her talk, Ms. Kakabadse called on everyone to realize that things we do every day can have a tremendous impact on the lives and environment of places we may never hear about. She encouraged the audience to take action and become involved in our global society. “More than the recognition ... and this beautiful event and the award, is the possibility of being part of a sisterhood, brotherhood, or network, that brings us all together into thinking that there are some planetary interests that we cannot put aside and must become part of our daily lives.”

Pioneering, Inspiration, Imagination

Dr. Bertrand Piccard also has a global perspective. “I come from a family for whom invention, innovation, technology, nature, and pioneering was very, very, important,” he said as he accepted the 2005 Lindbergh Award. His grandfather, Auguste, made the first balloon flights into the stratosphere using a pressurized capsule in the early 1930s. His father, Jacques, set a world record for the deepest ocean dive (with Lindbergh Foundation board member Don Walsh) in 1960 when they traveled seven miles to the bottom of the Mariana Trench in his bathyscaphe.

These historic record-setting achievements were not planned for the sole purpose of setting records, says Dr. Piccard, but rather to improve the quality of life. Actually, Auguste’s goal in traveling to the stratosphere in a pressurized cabin was to prove that it was possible. His discovery ultimately opened a path for safe modern aviation transportation. His father’s trip to the bottom of the



LIFE Magazine headline: “The Big Dive: Seven Miles Down to Sea’s Deepest Pit.”

Awardees, continued on page 5

Lindbergh Foundation 3

Hangar Party, continued from page 1

raising story about flying his Stinson 6000-B when it encountered serious mechanical problems. Upon making the turn to go back to the airport and land, his windscreen filled up with a large green object, which turned out to be the Fuji blimp! Luckily, some quick maneuvering avoided a crash that “could have rivaled the Hindenburg,” quipped Herrick. He then read a diary entry written by Anne Morrow Lindbergh, which described her first ride in an airplane with Charles Lindbergh as the pilot:

“The Ford plane shone – silver in the hot field – a group around it. We went over and stepped in. Mother, Aunt Alice, Elisabeth, Con and I (and Mr. Stout). It was like a train inside: wicker chairs, only slanted back at a terrific angle. The plane was nosed upwards.... Then he [Charles Lindbergh] came, across from the hangars.... He was striding along in his everyday suit and gray felt hat, hand in pocket He looked up quickly as he approached the plane and saw us and smiled, nodding. Then he stepped in, bending not to hit his head.... The engines whirred; easily, we started to roll – faster, faster. I did not look out – I was too excited, exalted, It all happened so quickly... Things whizzed past – trees, the hangars – I did not know when we left the ground. Suddenly I felt the real sensation of going up – a great lift, like a bird, like one’s dreams of flying – we soared in layers. That lift that took your breath away”

Pointing to his fully restored 1927 Ford Tri-motor, which was gleaming beautifully behind the audience, Herrick said, “That same aircraft is with us here tonight behind you, and in so many ways Charles and Anne Lindbergh are with us as well.” Audible gasps scattered across the room. “Aviation, both literally and figuratively, brings people together,” said Herrick. “For Charles Lindbergh and Anne Morrow on that day it brought them together, and their experience continues ... here this evening. Charles Lindbergh himself observed: ‘I owned the world that hour as I rode over it. Free of the earth, free of the mountains, free of the clouds, but how inseparably I was bound to them.’ His [Lindbergh’s] summary of the gift of flight and the appreciation of this beautiful Earth is what this evening is all about.”



ing the trip he realized that life is like flying in a balloon. A person’s life flows with the wind, and if you want to change the direction of

Dr. Bertrand Piccard flew in early from Switzerland to be a part of this event. An aviation pioneer and balloonist famous for his 1999 ‘round the world flight in a balloon, Dr. Piccard inspired the audience by talking about his profound metaphor for life. The revelation came during his 1999 balloon flight when he had lots of time to think. Dr. Piccard explained that dur-

your life, you must change altitude. Dr. Piccard’s philosophy resonates very much with the Lindbergh Foundation’s message in that he believes society should go with the wind, and with nature, not against it.



Dr. Clayton Cowl, Chief of the Aviation and Aerospace Medical Section at the Mayo Clinic, is a commercially rated balloon pilot and is considered a national expert on hot air balloon safety. He told of the extraordinary contributions Charles Lindbergh brought to aviation through the high altitude testing he participated in at the Mayo Clinic in Rochester, Minn., in 1942. Lindbergh spent two weeks at the Mayo Clinic conducting a series of experiments to test the effects of high altitudes on the body. “I think the people who did the type of shirt-sleeve research conducted by Charles Lindbergh were incredibly brave,” said Dr. Cowl. (See related story on page 6.)



Rutan planned his talk to inspire young people toward achievement.

Inc. magazine’s “Entrepreneur of the Year” **Burt Rutan**, capped off the evening, keeping the audience in rapt attention as he outlined his historic mentors and the progress of aviation and space travel during the course of his lifetime. He stated that his focus for this event was about how to inspire people, and in particular, how to inspire young people toward achievement. In keeping with the story-telling theme, Rutan shared a story recently told by his 89-year-old father. His father recalled being a boy of about 12, and wanting to go to the airport and watch people board the airplanes that would take them to far-away places the very same day. He recalled the excitement of simply *imagining*, but never *believing* that it could be for him. His enthusiasm, however, inspired his son, Burt, who has now made aviation history, and continues to inspire future generations to dream and achieve.

Rutan concluded his talk by showing the takeoff and landing of *SpaceShipOne* on Oct. 4, 2004, and narrating for the audience specific details about the flight. “Burt gave one of the most moving and inspirational aviation speeches I’ve ever heard,” said Roger Gomoll. “Everyone was inspired by his intelligence and technological knowledge and ability, and were instantly won over by the grace and humility in which he sees his own efforts fitting into the history of aviation.” Following Rutan’s presentation, the audience erupted with applause and a standing ovation. “Events like this ... make a person appreciate the contributions so many others have made,” said Wayne Flury in the EAA Chapter 878 newsletter. “I, and I’m sure many others, left the event that night with a renewed spirit, a confidence in the future of aviation, an enhanced appreciation of the shared role of emerging technologies and the environment, and a desire to find a way to make my own contribution.”

Awardees, continued from page 3

ocean was not to set a world record for the deepest dive, but to find out if there was life at the bottom of the ocean. Dr. Piccard explained the common belief in 1960 that it was safe to throw chemical and radioactive waste in the ocean. When his father and Don Walsh saw life on the bottom of the ocean they realized that if oxygen could travel down to such great depths, the currents would certainly bring it back up – and the hazardous waste, too. “This discovery was a huge milestone for the protection of the environment,” said Piccard.

“With my grandfather traveling to the stratosphere, and my father traveling to the bottom of the ocean, only the horizontal level was left for me,” laughed Piccard. His goal, however, was not to set seven world records, it was to achieve Jules Verne’s dream – to travel around the world at the speed and direction of the wind. Ultimately, Dr. Piccard got more than he bargained for with his successful ‘round-the-world balloon flight in the Orbiter 3 in 1999.

For Piccard this flight became a metaphor for life. “Life is a big balloon flight,” he said, explaining how the atmosphere is made of layers of wind that all go in different directions. “In a balloon you learn new ways to deal with the winds of life. Each time the winds of life push us in directions we cannot control, our only freedom is to change altitude in our mind, philosophy, or spirituality, in order to take a new direction ...”

During his ‘round-the-world journey, Dr. Piccard marveled at the beautiful landscapes, sunsets, and the view from above that made him understand that the world is fragile, but highly valuable. Among the beauty, however, there were unimaginable living conditions and diseases, which few of us hear about. That’s why Dr. Piccard and his business partner Brian Jones established the Winds of Hope Foundation, which is dedicated to focusing attention and financial support on neglected causes around the world, especially those affecting children. “When you have great success in life, it’s important what you do with it,” he said.

Technology to Solve Environmental Problems

The world burns one million tons of oil per hour, Dr. Piccard told the audience. Obviously, this level of consumption is unsustainable, but how do we change our path? Certainly, no one wants to give up the advantages (not to mention the profits) we enjoy today in order to protect the planet 10 or 20 or 50 years in the future. But there is a win-win solution for protecting the environment. Dr. Piccard believes that by investing in new technologies

to develop new energy sources, recycling methods, and ways to run industry, new markets can be developed and *this* will bring profits and improve the quality of life.



Solar Impulse has a 260-foot wingspan lined with solar panels.

To illustrate the fact that technology already exists to tackle some of these issues, and that incredible things can be accomplished with renewable energy, Dr. Piccard announced his *Solar Impulse* project. The entirely solar powered aircraft has a 260-foot wingspan completely lined with solar panels. It will take off using only solar energy, climb to 40,000 feet, and with batteries installed in the wings, will be able to spend the night in the air. The plane

will be used as a platform for communicating, educating, and inspiring new generations to invest in energy saving engines. The plane is expected to re-enact the history of aviation using only solar energy. The first flight through the night will be a major milestone. A New York-to-Paris flight with *Solar Impulse* is planned as well as cross-continental flights, and finally a trip around the world.

“We should all put ourselves in the shoes of the pioneers,” said Dr. Piccard. “We all have an action to do – as consumers, as human beings. Never wait for others to make the right decisions or actions. We should initiate these actions ourselves and be leaders.”

Then, the lights went out and John Lennon’s “Imagine” was played as images from Dr. Piccard’s program scrolled across the screen creating a powerful conclusion to an already inspiring, wise and heartfelt presentation.

Dr. Piccard then presented Kristina Lindbergh with a replica of the Swiss army knife he used to scratch the ice from the Orbiter 3’s window and said, “Use this if there is too much ice to see the light on the other side.”

Before the guests were excused to enjoy the scrumptious dessert buffet and the special exhibit of Lindbergh artifacts prepared by the Minnesota Historical Society, Erik Lindbergh concluded the evening, with heartfelt reflection. He said, “We are all so extraordinarily lucky to have shared this time with these two pioneers. Looking back to early balloonists and astronauts there is what they call the ‘overview perspective.’ My grandmother described this in her book

Earth Shine, Mike Melville described the fragile blue planet he saw below him with the thin atmosphere, and Jim Lovell said, ‘Everything we knew, loved and depended upon for our survival was down there on this fragile planet.’ It makes me feel it is my job to do everything I can to ensure that we survive on this planet into the future. That we work as our grandparents did for us – to save the quality of life they knew, for us – and we should do the same for future generations.”

– Dr. Bertrand Piccard