



# Candidate Information Form

Date Submitted: September 26, 2019

**CANDIDATE NAME:** Tim Cole

**Address:** 1017 15<sup>th</sup> St City: Greeley State: CO ZIP: 80631

**Telephone:** (970) 405-5436 E-mail: timcoleco@gmail.com

#### Briefly describe the basis for the submission:

Tim Cole has been involved in aviation his entire life. He was born in Sarasota, Florida in 1945 where his father, Walt, was a pilot with the Army Aviation Corp. While in the US Army, Tim served a tour in Viet Nam, as a technical inspector with the 129th Assault Helicopter Company. After his tour Cole served as an instructor for pilots in flight school. After going on a hot air balloon flight in 1977, Cole was hooked. It was not long after that he earned both his commercial hot air and later his gas rating. He became a regular in the Colorado skies.

Along with his flight experience, he also became a valuable resource for various round the world flight attempts including Maxie Anderson and Don Ida's, and those by Steve Fossett including Fossett's successful Spirit of Freedom flight.

In 1991, Cole along with his fellow balloonist and friend, Dennis Brown, worked together to develop the use of NH3 as a lifting gas. Brown made the first successful NH3 flight. Cole made the second. Cole set multiple records utilizing NH3 as a lifting gas. In 1994, he flew as copilot with Steve Fossett on a record-setting transatlantic balloon flight from St. Johns, Newfoundland to Hamburg, Germany.

Cole was the Flight Director for the successful 2015 Two Eagles trans-Pacific gas balloon flight by Troy Bradley and Leonid Tiukhtyaev. In 2016, Cole served as the senior technical advisor for the successful round the world solo flight by Russian adventurer Fedor Konyukhov. In the world's ballooning community, Cole, is often referred to as the "MacGyver of ballooning" has been a "go-to" consultant in many aspects of long-distance flight, building and design.

**Provide references:** Identify two individuals that can speak to the quality and significance of the achievement, and to the character of the candidate.

Name: John Kugler E-mail: jkugler@kuglercompany.com

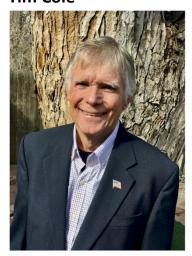
Name: Bert Padelt E-mail: <u>bestavi@aol.com</u>

#### PERSONS MAKING THE SUBMISSION:

Name: Victoria Cole E-mail: <a href="mailto:vikkicole@gmail.com">vikkicole@gmail.com</a>
Name: Nancy Brown E-mail: <a href="mailto:nanden0303@gmail.com">nanden0303@gmail.com</a>

### **CANDIDATE HISTORY:**

## **Tim Cole**



Notable: Accomplishments/Contributions, Development, Montgolfier Diploma, Records

Tim Cole has been involved in aviation his entire life. He was born in Sarasota, Florida in 1945 where his father, Walt, was a pilot with the Army Aviation Corp. After they moved to Anchorage, Alaska when Cole was 2, his father continued to fly airplanes for the Army. During his time in Alaska on the family homestead, Cole learned valuable skills by improvising and retooling their limited resources to build what he or the family needed. When his father would ferry planes, young Cole would go along for the ride and love of flying. In 1960, the family moved to

Greeley, Colorado, where he was an avid Boy Scout. Cole earned his Eagle Badge in 1965.

While in the US Army, Cole served a tour in Viet Nam, as a technical inspector with the 129th Assault Helicopter Company, part of the 1st Aviation Brigade. He was an honor graduate in each class of military service during his enlistment. Cole received a meritorious field promotion, was awarded the Army Commendation Medal for Meritorious Service and the Air Combat medal. After his tour Cole served as an instructor for pilots in flight school. Cole retained his A & P inspector's license after his service concluded.

After going on a hot air balloon flight in 1977, Cole was hooked. It was not long after that he earned both his commercial hot air and later his gas rating. He became a regular in the Colorado skies.

In 1982, Cole made a hot air flight from Grand Lake, Colorado over Long's Peak (altitude 14,259'). Cole learned valuable lessons in flight planning, weather and mountain crossing skills in a hot air balloon.

Along with his flight experience, he also became a valuable resource for Maxie Anderson and Don Ida's, Jules Verne, round the world attempts in the 1980's. Since then, Cole has participated on multiple round the world balloon flights including; Earth Winds Hilton, Cable and Wireless, as the Project Director for Steve Fossett's Solo Challenger attempts and as Project Director for the successful Spirit of Freedom flight. He was also an advisor to Fedor Konyukhov's 2016 successful round the world flight.

In 1991, Cole along with his fellow balloonist and friend, Dennis Brown, worked together to make the sport of gas ballooning more accessible in the United States. Helium Balloons were expensive and the fills for a flight were cost prohibitive for most pilots. Living in an agriculture

rich area, they turned to Anhydrous Ammonia (NH3), which is compressed into a liquid form and used as fertilizer. They developed the use of NH3 as a lifting gas. Together they researched and identified the proper fabric and technique for building an envelope that was both easy and inexpensive, but would also hold up to the NH3.

They built two envelopes, and through trial and error developed release ports for landing with the heavier gas. Cole calculated the lift to weight ratio for flights as NH3 has approximately 1/2 the lift of helium. An important part of the project was in the development of safety measures for working with the gas. In spring of 1991, Brown made the first successful NH3 flight. Cole made the second and then planned for setting record flights. That September, Cole set multiple records utilizing NH3 as a



NH3 balloon built by Tim Cole and Dennis Brown

lifting gas. After multiple successful flights, proving the concept, they developed balloon envelope kits, together with flight training, and a resurgence of gas ballooning in the States ensued. (Both were awarded the Montgolfier Diploma for their efforts.)

Cole holds one world and 26 National ballooning records. His 1991 duration record flight was cited by the National Aviation Hall of Fame as one of the top 10 flights of that year. Cole was named the Snowmass Award recipient in 1991 for his contributions to the art and science of ballooning. In 1992, he became a Fellow member with the Explorer's Club, an international adventurer's organization. In 1995, Cole and Brown were awarded Ballooning's highest honor, the Diploma Montgolfier by the Balloon Federation of America and the National Aeronautic Association. This International award is for a major contribution to the development of the sport of ballooning. That same year Cole was inducted into the Colorado Aviation Hall of Fame. (see attached Hall of Fame document).



n Cole Steve Fossett

In 1994, he flew as copilot with Steve Fossett on a record-setting transatlantic balloon flight from St. Johns, Newfoundland to Hamburg, Germany. This was deemed the most technically perfect crossing of the Atlantic in a balloon; flying 75 hours, 27 minutes with a standup landing to within 1/2 mile of their stated goal. Cole served as project director and engineer for Fossett's round the world attempts in 1996 and 1997, which set absolute duration and distance records, and in 1998 and 2001. Finally, in 2002, Fossett successfully circumnavigated the globe, solo, from

circumnavigated the globe, solo, from Northam, Australia to Central Queensland,

Australia. Cole was the first person Fossett called after breaking the record and the first person Fossett saw after landing.

As project director, Cole was responsible for all aspects of the design, engineering,

building and testing of Fossett's balloon and equipment. Cole developed a qualified and cohesive team and was responsible for all national and international logistics for team members and equipment. He coordinated international air search and rescue, airspace authorization, and weather services for flights. After the success of the 2002 flight, Cole was responsible for the capsule to become a permanent display in the Smithsonian Air and Space Museum.

In 2004, Cole was the first American to receive the Royal Aero Club Diploma for his contribution to the successful record breaking flights of David Hempleman-Adams. The Diploma was presented to him by Prince Andrew at the Naval and Military Club, St. James Palace, London.

Cole was the Flight Director for the successful 2015 Two Eagles trans-Pacific gas balloon flight by Troy Bradley and Leonid Tiukhtyaev. Their flight from Japan to Mexico set world gas balloon distance and duration records. In 2016, Cole served as the senior technical advisor for the successful round the world solo flight by Russian adventurer Fedor Konyukhov. This flight used the same design and track as Fossett's 2002 flight.

Throughout his ballooning career, Cole has participated in gas balloon flights as pilot, inflation director and launch master in the US and Europe. In addition he served on the BFA gas board for 5 years. He was the International Steward for the World Gas Competition in Phoenix, AZ.

Cole has participated in hot air balloon flights and festivals across the region. He served as Safety Director for many years for the Colorado Springs Balloon Festival and he served for 5 years as the Director of the Snowmass Balloon Festival. In addition, Cole has taught many students pilots who are still flying today. With the exception of his first hot air balloon, Cole designed and built all of his personal balloons including a tetrahedron design and 2 gas envelopes. In addition, he has designed and built fold-up baskets. What's more, Cole has designed or acted as consultant for many balloonists who have created their own homebuilt, experimental balloons. As a certified A & P mechanic, Cole continues to do annual balloon system inspections for local pilots and will do repairs as needed. In the world's ballooning community, Cole, is often referred to as the "MacGyver of ballooning" has been a "go-to" consultant in many aspects of long-distance flight, building and design.

In addition to his ballooning activities, Cole is a member of the Combat Veterans Motorcycle Association (CVMA), which is a 501(c)(3) charity of "Vets Helping Vets." He has served on the board as treasurer, co-founder of the Northern Colorado chapter. Cole continues to serve as honor guard for fallen veterans and continues to help organize service oriented projects each year. In 2012, he acted as an Honor Flight Guardian, taking WWII and Korean War veterans from Colorado to the war memorials in Washington D.C.

Cole is currently an independent agent with Mountain Storm Insurance, after retiring from Farmers Insurance Group. He has been an agent for 49 years. Cole lives in Greeley with his wife and partner, the love of his life, Vikki. They have twins. His son, Timothy is serving in the US Navy, living in Budapest, Hungary with his wife, Laura. Daughter, Elizabeth lives in Greeley with their delightful grandchildren Zoe 4, and Ryland 2. In addition Cole also has a daughter, Happy and son-in-law Lance and beautiful granddaughters, Sage and Kaia. Cole continues to fly in the Greeley, Colorado area, consult in balloon projects and travel with his family.



Dennis Brown and Tim Cole

Bristol UK, 1994



Dennis Brown

Dewey Reinhard

Tim Cole



Brown Cole Fossett Padelt Kugler



Tim Cole – Steve Fossett

Mendoza, Argentina



Yost Cole Kruger Brown



Australia 2001



America's Challenge 2005



Anhydrous Flight



COLE, Timothy Scott USA 1945- (HB/GB) See APPENDIX-AC/BF. Sport balloonist.

b: 5 Nov.1945 Sarasota, FL.

p: Multi-line insurance agency owner/operator.

e: Savanah (GA) E.G.T., Airframe and Powerplant Mechanic.

s: U.S.Army, Aviation Mechanic 1967-70.

f: First B-Flight July 1977 with Lynn Casseday; First B-Solo June 1976 from Fredrick, CO; FAA-Commercial Hot-air and Gas balloons Dec.1978; BFA-Master Instructor; Aviator since 1968; FAA-Airframe & Powerplant license with Inspection Authorization More than 800 B-Hours (18 Gas flights) by 1992.

I: Designer and builder of hot-air & gas balloons; 1980, Participated in the "Kitty Hawk" transcontinental project; 1981, Participated in the "Jules Verne" Trans-World project; 1983, Placed 3rd as Co-Pilot in National Gas Balloon Championships; 1987, Placed 3rd as Co-Pilot in Nat. Gas Balloon Championships; 1990, Designed & built own Ammonia-Gas Balloon; 1991, Participated in First NH3 Gas Balloon Race; Isn't Steward of World

Gas Balloon Championships.

m: NAA; BFA, Gas Balloon Committee; Co-Founder (w/D.BROWN) of the "Aero Research Consortorium"; Colorado B-Club.

h: Decorated for Valor as Helicopter crew chief in Vietnam; Anderson-Ida Memorial Trophy; Montgolfier Diploma 1994; Colorado Hall of Fame 1995. \*\*\*Epic flight 26 Sep.1991 in an Ammonia balloon. Established one World, and 13 National duration records, staying aloft 8 hours 47 minutes. \*\*\*Epic flight 1994 from Canada to Germany in an AM-Class balloon.

r: GBD-Newsletter Winter-1991; Bio-data form 1992; BL-Nov.95p9.

## Timothy Cole Colorado Aviation Historical Society Honored in 1995



Tim Cole and his copilot, Steve Fossett touched their balloon down in Hamburg, Germany on August 21, 1994 after a flight of over 75 hours and 4351 Km. across the Atlantic Ocean. This was without doubt, the most technically perfect major balloon flight in lighter than air (LTA) history and was but the most recent accomplishment for this young man. This first ever balloon flight across the Atlantic Ocean from Canada to Germany established a national altitude record for this balloon class. The flight was so precise that they as they started their landing descent, they crossed only 1/2 mile from their predetermined Hamburg way-point.

Tim was born on November 11, 1945 in Sarasota, Florida. He has been in Colorado since he was 15 years old. His earlier years in aviation were in the US Army helicopter training programs where he became an honor graduate, was rated "Chief Technical Inspector" and amassed over 1500 flying hours in rotary winged aircraft. In 1968-69, Tim served a Vietnam combat tour flying in helicopters, was honored for this work and later became an instructor for officers.

After leaving military service, he was attracted to ballooning, soloing in a hot air balloon in July 1978 at Fredrick, Colorado. At the time of his induction into the Colorado Aviation Hall of Fame he had accumulated over 1000 hours flying time in hot air, helium and ammonia gas balloons. Tim is rated as a commercial unrestricted balloon pilot, instructor and inspector/repairman as well as having an airframe and power plant (A&P) rating.

With a friend, Tim pioneered the use of anhydrous ammonia as a lifting gas and designed a balloon specifically for this inexpensive, agricultural gas, thereby opening up the sport of gas ballooning to persons who could not afford the prohibitively high cost of helium gas.

On September 26, 1991, near Greeley, Colorado, Tim made a world-record solo duration flight in an ammonia gas balloon of his design. This flight was named as one of the ten most important flights of the year for any of aircraft by the National Aeronautics Association. He and a colleague were awarded the "Montgolfier Diplome" by the Balloon Federation of America and the FAI. Tim was also elected a Fellow of the Explorers Club of New York for his LTA accomplishments.

Tim is active in the Balloon Federation of America, the National Aeronautics

Association, the Lighter-Than-Air Society, the Colorado Aero Club, the Colorado Aviation Historical Society and organizations associated with his insurance business.

Tim has represented Colorado well as a chief rigger and crew-member for a number of major transatlantic, transpacific and transcontinental flights by world famous balloonists. He is well known and respected for his technical background and dependability. He has shown leadership in organizing balloon activities in Colorado and other states and he is noted for his professionalism, adherence to safety standards and his fun approach to ballooning, as well as his unselfish devotion and innovative approach to problem solving.