

Don't Burst My Bubble: The History of Ballooning

Have you ever been to a carnival or driving in the country and looked up to see a large, colorful balloon floating through the air? Have you ever wondered what it would be like to be in the balloon or how ballooning got started? Man first took off in a balloon in the mid 1700s. There are many people who still fly balloons today. Ballooning is important because it led to the Wright Brothers and the first airplane. This report is about ballooning and the history of ballooning and will discuss ballooning from the mid-1700s to today.

The first flight in a balloon was created by Joseph and Etienne Montgolfiers. They were French brothers. They used a balloon powered by hot air. Before people could go up in the balloon, the king said animals should be sent up first. The first animals to go up were a sheep, a rooster, and a duck. They flew on September 19, 1783. The first flight with humans on board was piloted by Jean-Francois Pilatre de Rozier on November 21, 1783. The Marquis d'Arlandes was a passenger. They went 9,000 yards from where they first took off, in Paris, France. They went between 2,000 and 3,000 feet in the air. It was the first manned flight of any kind.

Jacques Alexandre Cesar Charles and Jean and Noel Robert flew the first hydrogen gas balloon on December 1, 1783. Over 400,000 people watched the launch. The basket was long and narrow and looked like a gondola, which is what they called it. They flew 27 miles from their launch site. They flew up to 1,000 feet in the air, which was 1,000 to 2,000 feet lower than the Montgolfiers. The only downside with this type of balloon is that it was expensive and hard to fill with hydrogen gas.

The Montgolfier brothers and Jacques Alexandre Cesar Charles were both trying to get a manned balloon up before each other. They used different kinds of balloons. The Montgolfiers used hot-air and Charles used hydrogen gas. People were nervous about them taking off, but

were excited. It was as if they were having a space race in the 1700s, almost 200 years before the space race between the Soviets and the Americans.

Ballooning came to England the following year. One of next important aeronauts was Vincent Lunardi from Tuscany. He piloted the first balloon flight in England on September 15, 1784. He was known as the Daredevil Aeronaut. He had a hydrogen balloon. He named his balloon the Grand Air Balloon. He flew from Scotland several times. James Sadler was a balloonist and a chemist. He was the first English balloonist. His first flight was on October 4, 1784. He also flew in 1795, 1810, 1811, 1812, and 1814. He flew from England and Ireland.

Many inventors began flying balloons that were not powered by hot air or hydrogen. Charles Green was the most famous balloonist of the United Kingdom in the 19th century. He flew over 500 times! He used coal to power his balloon. His first flight was on July 19, 1821. In 1836 he flew from Vauxhall Gardens, London to Weilburg, Germany. He set the long distance record of 480 miles. He held the record until 1907 when Monck Mason and Robber Holland went further. This flight took 18 hours. Green is also known for inventing the trail rope, which helped land the balloon. Henri Giffard, whose name is the 51st one listed on the Eiffel Tower, invented the injector, which is a type of pump used in his engine and the dirigible. He flew the first powered and controlled flight on September 24, 1852. He used a steam engine. Paul Haenlein, a mechanical engineer, was from Germany. He first flew on December 13, 1872. He used fuel obtained from gas in the balloon. He was the first to create a dirigible airship with a gas engine or an internal combustion engine.

Ferdinand, Count von Zeppelin made the first rigid airship. His first flight was July 2, 1900. The name of the ship was the LZ-1. As his name said, he invented the zeppelin. The LZ-1 was

420 feet long and its diameter was 38 feet. It went 20 mile per hour. These airships were used by Germany to bomb Paris and London in WW1. The Hindenburg is the most famous zeppelin.

Auguste and Jean Piccard were twin brothers from Switzerland. Auguste was a physicist and Jean was an engineer and a chemist. In 1931, they flew the first balloon to reach the stratosphere. On May 27, 1931, Auguste and his assistant Paul Kipfer reached the stratosphere, going 51,775 feet (15,781 meters) in the air. Jean and his wife Jeannette flew October 23, 1934. They went 57,579 feet (17,550 meters). A world record flight in their balloon was on November 20, 1933. The pilot was Thomas G.W. Settle. In 1937, Jean Piccard flew solo with 92 latex balloons instead of one big balloon. Jean and Jeannette's son, Donald, was also involved with balloons. He invented the first superpressure balloon, which was used to study the weather—a weather balloon!

Paul “Ed” Yost was an American. He became involved in lighter-than-air ballooning when he worked for General Motors. He flew high altitude research balloons. He is called the father of modern hot-air ballooning. He invented burners filled with bottled propane. His balloons carried their own fuel. He invented the tear-drop shaped balloon. On October 22, 1960, he flew the first free flight of a modern hot air balloon in Bruning, NE. In 1976 he set 13 aviation world records. In 1978 he made the first transatlantic trip in a balloon. The balloon was called the Double Eagle II.

Since 1978 there have been many records set in modern ballooning. In 1984, Joseph Kittinger flew a helium balloon, Rosie O'Grandy's Balloon of Peace, in the first solo transatlantic flight. In 1987, Richard Branson, a British entrepreneur, and Per Lindstrand, a Swedish aeronaut, took the first transatlantic hot-air balloon flight in the Virgin Atlantic Flyer. In 1991, Branson and Lindstrand made the first transpacific flight in a hot air balloon. In 1995, Steve Faucett, who was

an American, flew a helium filled balloon, the Solo Challenger, in the first solo transpacific balloon flight. In 1999, Bertrand Piccard, who was the grandson of Auguste Piccard, and Brian Jones, flew a balloon that used a combination of helium and hot air. It was called the Breitling Orbiter III and they flew in the first around-the-world balloon flight. In 2002, Steve Faucett took the first solo balloon flight around the world in the Bud Light Spirit of Freedom. This balloon was also powered by helium and hot air.

The history of ballooning is important because it led to airplanes, which led to NASA, which led to the moon landing. The explorers all had different names, but they all had something that did not change. They were all aeronauts. The word “naut” comes from Latin and means sailor. They were sky sailors and they were brave, smart, and strong. The rest of humanity owes them a round of applause for their courage.

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