

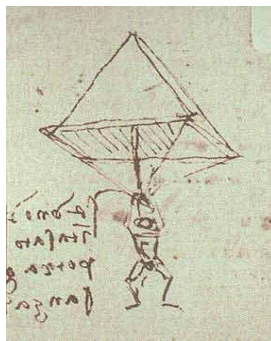
## History of Parachutes

The word parachute comes from the French words ‘*parer*,’ which means to avoid and is based on the Ancient Greek prefix of ‘*para*,’ which signifies against; whereas ‘*chute*’ means fall. Parachute, thus, means against the fall.

The main purpose of the parachute is to act as a drag on an object falling and hung beneath it. The drag factor takes place due to a reduction in speed, which is caused by the resistance of the air pushing on the area of the parachute. The main two forces working when dealing with parachutes are gravity and air resistance.

The earliest version of a parachute was created in 852 by a scholar from Cordoba in Andalusia (Spain) called Abbas Ibn Firnas, also known as Armen Firman. In an attempt to fly, he made this huge cloak and tried using it like wings. He jumped off a tower in Cordoba, but injured himself. So though his attempt at flying did not succeed, it is considered the earliest parachute made.

In the late 15<sup>th</sup> century, sometime between 1485 and 1495, Leonardo Da Vinci made a sketch of a parachute. The sketch shows a linen tent that is pulled over a pyramid shape structure and has four ropes to which the person is attached. In June 2000, a British man called Adrian Nicholas wanted to prove Da Vinci right, so he jumped from 10000 feet from a hot air balloon. He landed successfully and by that proved Da Vinci right against many experts who believed it would not work.



*Da Vinci's parachute sketch*

In 1617, a Croatian named Faust Vrancic made a device similar to Da Vinci's sketch. He jumped off a tower in Venice and called the rigid structure “the Flying Man.”

In 1777, Joseph Montgolfier, the famous French balloonist, attached a sheep to a parachute and dropped it from a tower. Then in 1785, Jean Pierre Blanchard dropped a dog in a basket attached to a parachute from a balloon. However, on 22<sup>nd</sup> October, 1797, Andre Jacques Garnerin dropped over 2000 feet from a balloon without a rigid frame. He is given the credit to have the first jump in a soft parachute. He also made the first vented parachute attempting to increase the stability of the descent of the parachute.

Name \_\_\_\_\_

Date \_\_\_\_\_

## History of Parachutes (Cont'd)

During most of the 19<sup>th</sup> century, there was little progress with parachutes and they were mainly associated with daredevil acts. They were viewed unfavorably when Robert Cocking fell to his death in 1837 using an inverted cone shaped parachute, which means that the point of the parachute was down. He became the first victim in parachuting. In 1885, Thomas Scott Baldwin was the first American to jump in a parachute from a balloon and was the first to invent a parachute harness.

In 1911, Grant Morton was the first to jump in a parachute from a plane. In 1912, Captain Albert Berry was the first to jump using a 'packed on the aviator' style parachute from a moving plane. In 1913, Georgia Thompson Broadwich, known as "Tiny," was the first woman to jump using a parachute and the first in the world to carry out a free-fall jump with a manually operated parachute.

In the beginning of World War I, parachutes were rarely used, as people still did not trust them. They were mainly used in case of emergency if balloons were shot down to rescue themselves. The German air service was the first to recognize the importance of the parachutes during wartime, though the parachutes were still not very effective. However they felt that it provided an option for their pilots in case they were shot down.

In 1927, the Russians recognized that it would be very useful to drop soldiers in enemy country using parachutes. In 1940, the Germans decided to apply this against Belgium, Norway, and the Netherlands. Then later in World War II, the Allied parachute troops, known as the paratroopers, used parachutes in many of their campaigns.

Parachutes were not only dropped for fighting or reconnaissance purposes, but also to drop supplies.

## History of Parachutes Questions

### Multiple Choice:

1. Parachute means:
  - a. Against the fall
  - b. Against the wind
  - c. Avoiding the wing
  - d. None of the above
  
2. The earliest version of a parachute was created by:
  - a. Leonardo Da Vinci
  - b. Abbas Ibn Firnas
  - c. Faust Vrancic
  - d. Adrian Nicholas
  
3. The main two forces concerning parachutes are:
  - a. Gravity and wind resistance
  - b. Gravity and mass
  - c. Gravity and velocity
  - d. Velocity and wind resistance
  
4. The first in the world to carry out a free-fall jump using a parachute was:
  - a. A sheep
  - b. A dog
  - c. A man
  - d. A woman

### List three names that have contributed to the history of parachutes:

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

### True or False:

- \_\_\_ 8. Leonardo Da Vinci's sketch of a parachute was in the shape of a pyramid and had four ropes.
- \_\_\_ 9. Robert Cocking is the first person to die in a parachuting accident.

## History of Parachutes Answers

### Multiple Choice:

1. Parachute means:
  - a. **Against the fall**
  - b. Against the wind
  - c. Avoiding the wing
  - d. None of the above
  
2. The earliest version of a parachute was created by:
  - a. Leonardo Da Vinci
  - b. **Abbas Ibn Firnas**
  - c. Faust Vrancic
  - d. Adrian Nicholas
  
3. The main two forces concerning parachutes are:
  - a. **Gravity and wind resistance**
  - b. Gravity and mass
  - c. Gravity and velocity
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4. The first in the world to carry out a free-fall jump using a parachute was:
  - a. A sheep
  - b. A dog
  - c. A man
  - d. **A woman**

### List three names that have contributed to the history of parachutes:

Abbas Ibn Firnas, also known as Armen Firman  
Leonardo Da Vinci  
Faust Vrancic  
Joseph Montgolfier  
Jean Pierre Blanchard  
Andre Jacques Garnerin  
Thomas Scott Baldwin  
Grant Morton  
Captain Albert Berry  
Georgia Thompson Broadwich, known as "Tiny"

### True or False:

- T  8. Leonardo Da Vinci's sketch of a parachute was in the shape of a pyramid and had four ropes.
- T  9. Robert Cocking is the first person to die in a parachuting accident.