

The Balloonist's Prayer

May the winds welcome you with softness. May the sun bless you with his warm hands. May you fly so high and so well that God joins you in laughter and sets you gently back into the loving arms of Mother Earth.

Hot air ballooning is the world's oldest form of aviation and air travel. In 1783, the Montgolfier brothers of Annonay, France, made the first successful balloon flight in a balloon filled with smoke from a straw-fed fire. Today, 225 years later, ballooning has become a recreational and competitive sport.

Why do flights take place only in the morning and the late afternoon?

Balloons need stable winds to operate effectively and the hours just following sunrise and approximately 2 hours before sunset are the best for finding these winds. Since balloons move with the air, the weather is very important in deciding to whether or not to fly. The pilot chooses a launch site to use the wind currents to fly towards a suitable landing site.

How is the balloon inflated?

When the time comes to put the balloon up, the envelope is removed from the bag and laid out in a long line. The burners are attached to the uprights, and the basket is attached to the cables on the bottom of the envelope. An engine driven fan is used to inflate the envelope with cold air.

When partially inflated, the air is heated by a burner and the envelope rises above the basket.

With further heating, there is sufficient 'lift' for the balloon to fly.

What kind of fuel is used for the burners?

To heat the air, the burners are fueled by propane gas, much the same as you probably use in your backyard barbecue grill. The burners do not run continuously; they are only used intermittently to heat the air to maintain the required lift.

How tall are balloons?

Depending on the weight capacity, balloons may be as tall as 100 feet but the average balloon is 70 feet.

How large are hot air balloons?

Most balloons are larger than your house. They hold from 19,000 to 211,000 cubic feet of air and loom from 50 to 90 feet.

How far do balloons fly?

Again...it depends on the wind speed. Hot Air Balloons travel with the wind and an hour flight can carry it up to 15 miles, sometimes more, sometimes less. The balloon also flies at different altitudes. Although the balloon is at the mercy of the wind when it comes to direction, the vertical control of a balloon can be very precise. It is not unusual for our pilots to be able to brush the bottom of the basket across the tops of brush, or inches from the ground. A leaf picked from a treetop is a very worthwhile souvenir of the flight!

How high do balloons fly?

Most balloonists enjoy low level flight. The typical balloon flight would be anywhere from tree level to about 3,000 feet above the ground.

How does the chase crew know where they are?

Radios are used to stay in contact with the chase crew as well as with Air Traffic Control and other aircraft flying in the vicinity.

Who can fly a balloon?

The Federal Aviation Administration issues a Balloon Pilot Certificate to candidates who pass an FAA written examination, obtain a prescribed number of hours in a balloon, make a solo flight to altitude, pass a flight test, and submit a medical statement.

How do you steer a balloon?

The balloon goes wherever the wind takes it. However, pilots can seek higher or lower altitudes to find wind currents of various directions. We refer to it as the truest form of sailing.

What are the best conditions for flight in a balloon?

A balloon flies better in cooler weather since the hot air gets a better "lift." Balloonists usually fly just after dawn or before dusk, because there is less wind at these times.

Is it cold in a balloon?

At high altitude, it is colder than at ground level, generally 3.5 degrees colder for each 1,000 feet of altitude.

What kind of cloth is the balloon made of?

The colorful envelope is usually made of nylon or polyester, the same type of cloth that parachutes are made of. It is very tightly woven and is coated with a material that makes it very air tight. The nylon is only used to keep the hot air in the balloon. The basket load is transferred by steel or Kevlar cables to a series of vertical load tapes which carry the load. Balloons range in size from about 54,000 cubic feet for a one- or two-person balloon to over 250,000 cubic feet for a balloon capable of carrying a pilot plus eight or ten passengers.

Why is the basket made of wicker?

The wicker basket has proven to be very strong for its weight and is flexible. The wicker is sometimes woven around a steel or aluminum frame, which helps to support the upright posts upon which the burner is mounted. The top rim of the basket and the uprights are usually padded and covered in suede or leather.