# 2) LIGHTER THAN AIR - BALLOONS

## 2.1) BARTOLOMEU DE GUSMAO (1709)

Bartolomeu de Gusmão petitioned King John V of Portugal for support for his invention of an airship. Aerostat model balloon experiment: on 8 August 1709 Gusmão gave a public exhibition in Lisbon when he propelled a ball to the roof by combustion.

### 2.2) MONTGOLFIER BROTHERS - FIRST HOT AIR BALLOONS (1783)

Joseph Michel Montgolfier & Jacques Etienne Montgolfier were inventors of the first hot air balloon. Smoke from a fire to blow hot air into a silk bag was used. The silk bag was attached to a basket. The hot air then rose and allowed the balloon to be lighter-than-air. 1783 'Le Martial' - The first passengers in a Montgolfier balloon were a sheep, rooster, and duck.

Montgolfier Balloon 15 October 1783 - Tethered flight with passengers Pilatre de Rozier and the Marquis D'Arlandes



Postcard published by St. Kitts Philatelic Bureau



#### 2.3) DEVELOPMENT OF AIR BALLOONS

1798 Pierre Testu-Brissy - Ascent on horseback.



1861 Intrepid - A hydrogen gas balloon built for use of the Union Army Balloon Corps during the American Civil War.





1935 Stratosphere balloon Explorer II.

#### 2.4) MODERN AIR BALLOONS

Modern hot air balloon festival.

