



» Searching for information ..... 100%

## THE 18<sup>TH</sup> CENTURY

In the 18<sup>th</sup> century people still did not live very comfortable lives. Modes of transport were largely limited to horse-pulled carriages in which travel was tiring and slow. The vast majority of epoch-making inventions that made travel easier, occurred only in later centuries.

But this period, too, is worthy of our attention: it witnessed several epoch-making discoveries that led to the first developments in the production of the motor cars, flying machines and ocean-going ships of the future. You now find yourself in the century of the pioneers of invention.

» Generating timeline ..... 100%

## TIMELINE

• Steam engine  
Thomas Newcomen  
1712



• Improved steam engine  
James Watt  
1765



• First steam-propelled vehicle  
N. J. Cugnot  
1769



• First submarine  
David Bushnell  
1775



• Hot-air balloon  
Montgolfier brothers  
1783



• First steamer  
Jouffroy d'Abbans  
1783



• Propeller-powered hot-air balloon  
Jean Baptiste Meusnier  
1784



• Motorless glider  
George Cayley  
1796



Century:	18th
Day:	1. 1.
Year:	1701

Speed:	260 km/h
Temperature:	-12 °C
Time:	8.15:36



### HOT-AIR BALLOON

*Height:* 20 m

*Width:* 14 m

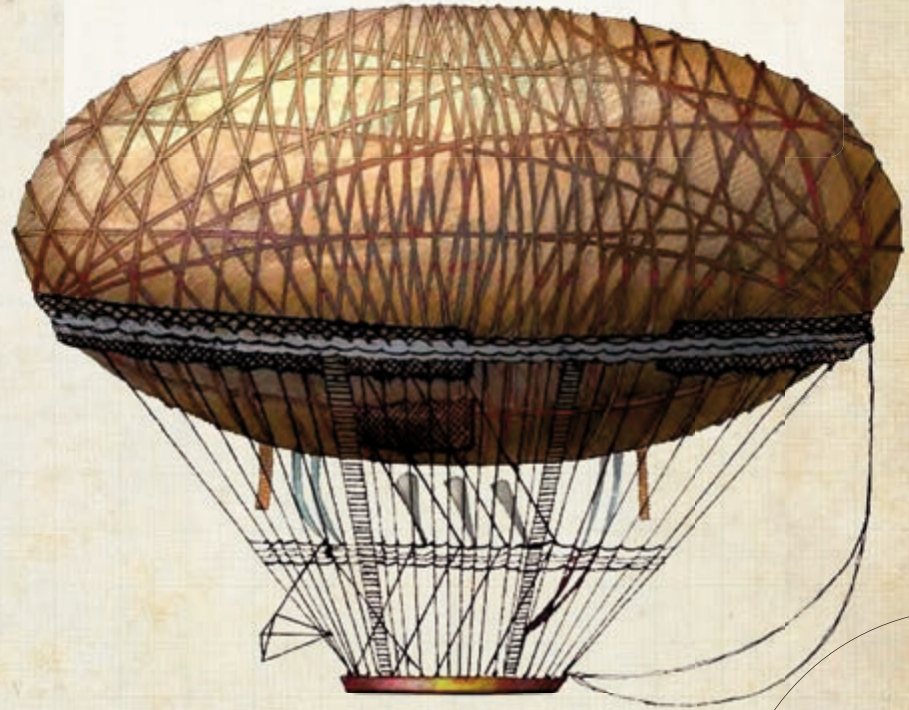
On 4 June 1783 the hot-air balloon of the Montgolfier brothers of France first took to the skies. Its first passengers

were a duck, a cock and a sheep, as people as yet lacked the courage for such an adventurous undertaking. On its first flight the balloon, which was made of paper, covered more than a kilometre in ten minutes.

### MEUSNIER'S BALLOON

*Length:* 84 m

In 1784 French engineer Jean Baptiste Meusnier launched his elliptical hot-air balloon shortly after the Montgolfier brothers launched theirs. It was powered by three large propellers driven by eighty men. The boat-shaped basket was suspended from the canopy by a system of ropes.



» Searching for information ..... 100%

### 19<sup>TH</sup> CENTURY

This century was easily the most important in terms of the invention of epoch-making designs for modes of transport. The greatest invention of the 18th century – the steam engine – created enormous opportunities that were seized on

immediately by technical engineers. Steam was used to power coaches, wheels and ships, and soon the first steam locomotive was developed. From there it was but a small step to the petrol engine – the first motor cars saw the light of day. Modes of transport powered by engines became a reality.

» Generating timeline ..... 100%

### TIMELINE

• Steam-driven carriage  
Richard Trevithick  
1803



• First locomotive  
Richard Trevithick  
1804



• Human-propelled velocipede  
Karel von Drais  
1818



• First ship powered by screw-propeller  
1843



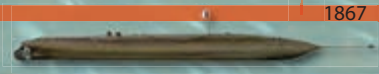
• Dirigible airship  
Henri Giffard  
1852



• Pedal-driven bicycle  
K. MacMillan  
1863



• First powered submarine  
(French navy)  
1863



• Steam-driven bicycle  
Perreaux a Michaux  
1867



• First motor car  
Karl Benz  
1885



• First motorcycle  
Gottlieb Daimler  
1885



• First four-wheel automobile  
Gottlieb Daimler  
1886



• First truck  
Gottlieb Daimler  
1892



Century:	19th
Day:	1. 1.
Year:	1801

Speed:	300 000 km/s
Temperature:	-250 °C
Time:	7.42:36

Bertha Benz making the first long-distance drive (106 kilometres) in the Benz Velo automobile. The car was built by her husband Karl Benz. That this drive was made by a woman convinced people that this new invention was safe.



Century:	19th
Day:	5. 8.
Year:	1888

Speed:	19 km/h
Temperature:	28 °C
Time:	15.42:36

» Searching for information ..... 100%

## 20<sup>TH</sup> CENTURY

A century of unparalleled scientific progress. In the early years of the 20th century humans were still attempting to be borne up into the skies in machines that were heavier than air – for a few hundred metres at least; less than 60 years later

the first cosmonaut orbited Earth. Within a few decades humans took control of the air, space and the ocean deep. Flying machines, automobiles, ships and submarines became everyday matters that were taken for granted. Technical engineers bettered earlier achievements that had been expected to remain unrivalled.

» Generating timeline ..... 100%

### TIMELINE

First controlled flight  
Wright brothers  
1903



First flight in Europe  
Alberto Santos-Dumont  
1906



Ford – first mass-produced  
automobile  
1908



Flight across the English  
Channel, Louis Blériot  
1909



Flight across the Atlantic Ocean  
J. Alcock, A. W. Brown  
1919

First helicopter  
Focke Fa-61  
1936



Supersonic aeroplane  
Bell X-1  
1947



Nautilus – nuclear-powered  
submarine  
1955



First satellite  
Sputnik 1  
1957



First living creature in space  
Sputnik 2  
1957



First human in space,  
Yuri Gagarin  
1961



First woman in space  
Valentina Tereshkova  
1963

Humans orbit the Moon  
Apollo 8  
1969

First humans on  
the Moon, Apollo 11  
1969



Supersonic passenger airliner  
Concorde  
1969



Test flight of space shuttle  
Enterprise  
1977

Space shuttle Columbia  
in orbit  
1981



Century:	20th
Day:	1. 1.
Year:	1901

Speed:	300 000 km/s
Temperature:	-242 °C
Time:	2.31:22

### FOCKE FA-61



In 1937 the German engineer Henrich Focke designed the first functional helicopter with vertical take-off and landing.



### SIKORSKY VS 300



*Déca:* 8,5 m

An American helicopter. First took to the air in 1961.



### BOEING VERTOL 234



*Length:* 15,5 m

*Speed:* 291 km/h

Civilian version of an American helicopter that flew in the Vietnam War. First took to the air in 1961.



### AIRSHIP



In the 20th century, airships, too, were used for transportation, principally for the conveyance of heavy loads. They are filled with helium.



» Searching for information ..... 100%

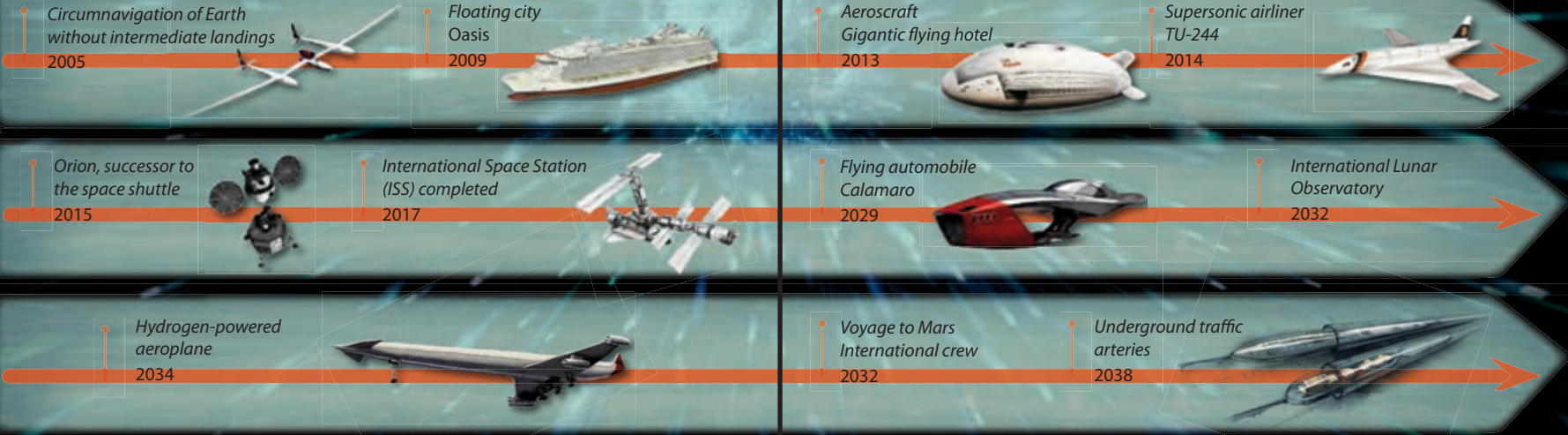
### 21<sup>ST</sup> CENTURY

In the 20th century humankind mastered space travel. At the beginning of the new millennium we began to look further still into the future. Short visits to Earth orbit became a permanent presence; humankind established settlements

on the Moon, paid visits to Mars, and began to take a look at more distant planets. For a long time now the use of automobiles has not been restricted to land, and the ocean waves are ploughed by great floating cities. Intelligent vehicles are controlled by modern computers that have no need of human interference. The 21st is the century of the computer and interplanetary flight.

» Generating timeline ..... 100%

### TIMELINE



Century:	21st
Day:	1. 1.
Year:	2001

Speed:	300 000 km/s
Temperature:	-238 °C
Time:	2.31:22



## LUNAR OBSERVATORY

In 2032 an observatory on the Moon came into operation, making it the first definitive human settlement on Earth's nearest neighbour. The first base here was established by a US-Russian team. It took almost five years for the transportation of materials and the completion of building work.



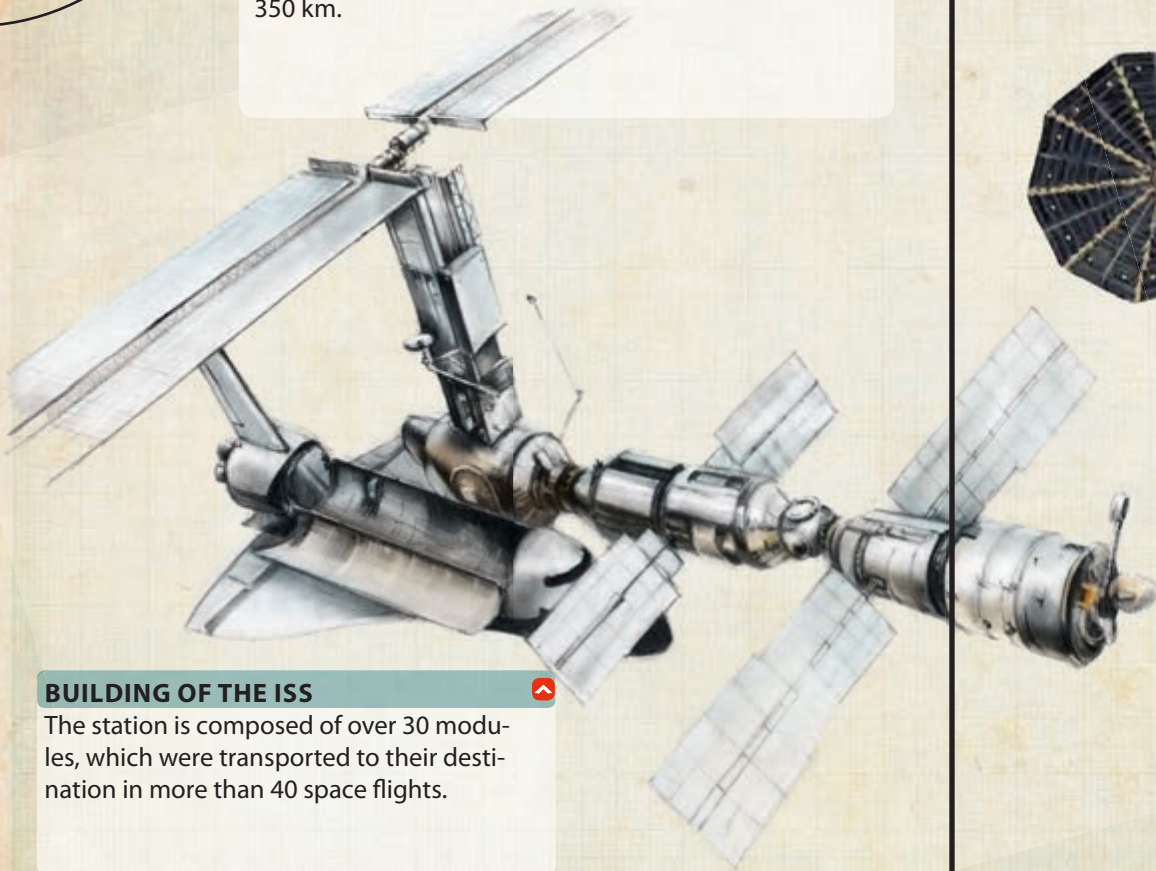
Century:	21st
Day:	12. 11.
Year:	2032

Speed:	10 km/h
Temperature:	-25 °C
Time:	12.46:35

## ISS

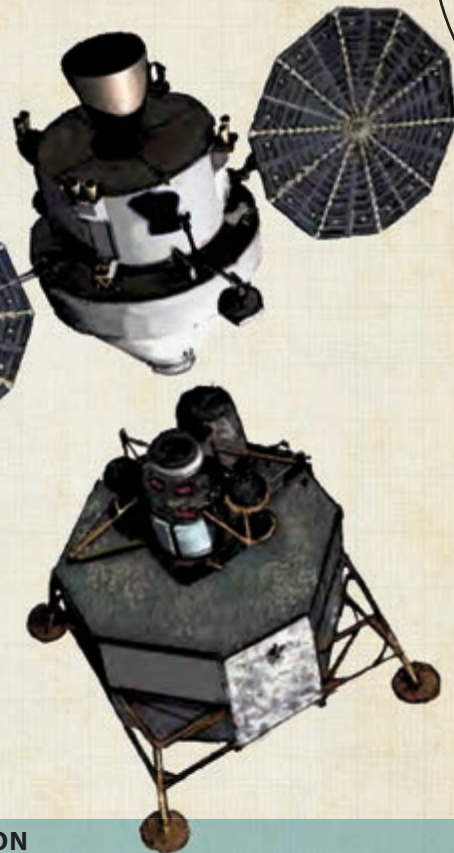
Length: 74 m  
Width: 108,4 m

The International Space Station has been permanently occupied since 2000. It orbits the Earth at an altitude of 350 km.



### BUILDING OF THE ISS

The station is composed of over 30 modules, which were transported to their destination in more than 40 space flights.



### ORION

The spacecraft Orion is a successor to the space shuttles, which went out of commission after 2011. It performed its first piloted flight in 2014. It is composed of two parts: a crew module and a service module.

# TIME MACHINE • VEHICLES

## 18th CENTURY

Rem volo videm estiam est undae. Od ut alis est odigenis coremperum faccum quunda nimusci-am volum alitatempori remque nobitat ecepudi ut ipissintur, oditatis et qui ad mos inulliquiate netuscia quae. Nam hilissuntio. Rectat quissum facest et voluptiumqui delestiusam



## 19th CENTURY

Asperibus modit quatemquae. Ihicipsunt verum quid ut autempore dolore conecus alicit ullora ditatiati sapiendandam re et laborep eribus cum ex et omnimusdam incius providipide parci odition sectiam expedic tempore mp



## 21st CENTURY

To to consequi dolore volenecae pernatum numetur, que volorro modi commo et venitium imaio. Obit ditasserum re autatum res dolupta ssitatem et officip suntibus cone reperis ea id quos se cor si quae magnima consequae parum voluptatem ex es corroviti sita consequam vere



## 20th CENTURY

Et quos perit placcus, officient enes maximinel mod quos estota conet fugiatur? Otaqui untotae-rum eati dit lant. Sa essum faccum quodit harum aris natium rehent experrum explis modit quissitate rerum sinvenihit, nonemol uptatio nemolup tatu-rem pernam ime

