

Space travel essay example

[Environment](#), [Earth](#)



Space travel involves sending manned and unmanned spacecrafts into the low orbits of the earth and space. Space travel has helped in the exploration of life on other planets such as Mars. Landing on the moon in 1968 was a major milestone in space travel which paved the way for manned space missions. This is a paper on space exploration. Special focus is given to the history, benefits, costs, and requirements for space travel.

Studies in space rocket development occurred in three countries simultaneously. Three scientists championed rocket engine development and these were Konstantin Tsiolkovski of Russia, Robert Goddard of the United States, and Hermann Oberth of Germany. During WWII, Nazi Germany conceived the idea of long-distance rockets to bomb distant targets. This was effectively used in the late stages of the war when London was hit by V- 2 missiles with a 200-mile range and travelling at 3500 miles per hour and an altitude of 60 miles. Later, after the war, the United States and Soviet Union launched missile programs in their respective countries.

Soviets launched their first satellite, Sputnik 1 in 1957 while a Russian, Lt. Yuri Gagarin orbited the earth in 1961 aboard Vostok 1. In 1961, the United States president, John F Kennedy, made landing a man on the moon and bringing him back to earth a national goal. In 1969, Neil Armstrong accomplished this by being the first man to set foot on the moon.

Space travel has been applied widely in space exploration. Six Apollo missions were made to probe the moon between 1969 and 1972. Unmanned spacecrafts probed the moons service during the early 1960s. In the early 1970s, satellites were widely used for orbiting communication and navigation. Satellites were used by the Allied Forces in the Gulf War, which

enabled them to win the war by studying enemy troop formations. The International Space Station is a result of joint efforts from different countries. The station is a research laboratory which signifies cooperation in space exploration.

Space exploration has led to the development of other technologies in use for ordinary non space applications. These include application such as cell phone cameras, clean energy, software, CAT scans, robotics, scratch resistant lenses, water filtration and purification, medicine, transportation, and engineering. The long term goal of space exploration against the achievements made so far is to send humans and robots above the low earth orbit and achieve sustained access to space exploration destinations such as the moon, Mars, and asteroids.

The cost of space travel is high for both astronauts and civilians. It costs \$450 million to launch a space shuttle. A total of 135 missions would cost a total sum of \$192 billion. It is estimated that the commercial cost of space travel per individual would range around \$200, 000. The challenger cost \$1.7 billion to launch. It was replaced by the Enterprise, which was the first spacecraft, and cost \$196 billion dollars to launch. Columbia cost \$192 billion dollars to launch that have not been replaced yet. Others space crafts include Discovery, Atlantis, and Endeavour that launched at a total cost of \$196 billion each. A single spacesuit costs about \$12 million.

Space exploration seeks to establish the possibility of life on other planets and the capability of their environments to support life by searching for water or energy. This is achieved through analysis of radio feedback from signals sent into space. The existence of live on other planets would enhance

space exploration by offering bases for space stations. NASA's Dr. William Danch estimates Mars will be habitable for the next several billion years. An individual can apply to NASA to become an astronaut. Applications are categorized into two groups, civilian and military. An applicant must be a holder of at least a bachelor's degree in engineering, biological sciences, physical science or mathematics. The majority of applicants are Master's and PhD holders. NASA accepts individuals with 1000 hours as a pilot-in command in a jet aircraft. The ideal candidate must be physically fit with a 20/20 natural or corrective lenses vision, 140/90 blood pressure at a sitting position, a height between 62 and 75 inches and a good physical shape. Life in space is almost similar to earth with a few variations due to the low gravity. Astronauts use sponge baths instead of normal showers, observe nutrition, work out for perfect physical shape, and sleep in sleeping bags attached to walls. Astronauts go to the bathroom by using belts to strap themselves to the seats while a bag collects the waste.