

How did the Americans achieve a successful moon landing in 1969 and what was its importance for the US? (2014)

The first step to successfully achieving the moon landing was taken before the goal was even set. This step was the authorization, by President Eisenhower, to form the National Aeronautics and Space Administration, commonly known as NASA, in 1958. NASA's aim was to develop the US space program. The formation of NASA was an important and essential step that allowed the funding and technology needed for the moon landing to be sourced. In 1958, the first US satellite was also launched; the Explorer I. This was very late considering the advancements the Russians were experiencing. The Americans hoped the newly formed NASA would help them win the space race that was now in full swing.

The Mercury Program began in 1959 and its major aim was to see if and how humans could survive in space. This information was essential if the moon landing was to be in any way achievable. It efficiently gathered an abundance of essential information on how human beings would fare in space. They also successfully developed hardware for safe space flights and how to return to earth. Up until 1963, the mercury program flew many test flights, including six manned missions. John Glenn became the first American man to orbit the earth in 1962. Glenn became a national hero and a source of inspiration.

Project Gemini followed the Mercury Program. It used the information gathered during the Mercury missions to conduct experiments and work out solutions for other problems they faced. From 1964 to 1966, ten different manned missions took place. Many improvements were made, especially in improving techniques for spacecraft control and spacewalking.

The Apollo Space Program was originally formed in the late 50s, however, after JFK's new goal was announced in 1962 the Apollo Space Program's new focus was to land an American on the moon and bring him home safely before the end of the decade. In 1967, a big breakthrough was made after the hugely successful testing of the Saturn V rocket. It was the most powerful rocket ever built and had been designed by the scientist Wernher von Braun. Its first test amazed all who saw it. The Saturn V rocket was later used on the Apollo spacecraft.

In October 1968, over a thousand modifications had been made to the spacecraft and Apollo 7 was launched and successfully completed an orbit of the earth. Two months later, an even bigger success was achieved when Apollo 8 completed the first manned orbit of the moon. The US had navigated a manned spacecraft to the moon and back. The Apollo 10 mission of May 1969 was essentially a dress rehearsal for the moon landing. This mission tested all components and procedures, excluding the actual landing. It was a two manned craft and it descended to within 15km of the surface of the moon. All of these successful missions meant the way was now open for the Americans to achieve a successful moon landing.

On July 16th of 1969, the eight-day mission of Apollo 11 began. The technology that the Americans had developed in the Mercury, Gemini and Apollo programs meant the lift off went without a hitch. It orbited the earth one and a half times and after reaching a height of 25,000mph, it began its journey to the moon. At 4:17pm on July 19th, the spacecraft landed.

The first moon landings importance cannot be underestimated. Neil Armstrong's first step onto the moon was watched on television by 600 million people, a fifth of the world's population at the time. Not only did it paint Armstrong, Aldrin and Collins as heroes, but America as a whole was admired with awe and astonishment due to this huge achievement. The USA's determination and bravery had paid off and their superiority was being recognised. It was a victory for democracy and capitalism all around the world. The USSR felt a serious blow and the Cold War seemed to have shifted. In foreign policy terms, the moon landing was of indescribable importance.

Domestically, it was an immensely important event too. The American public felt overwhelmingly proud and patriotic. There had been a fear in the 50s that the USSR were becoming technologically superior, especially after the Sputnik successes. However, the Americans had now overtaken the Soviets in an undeniable fashion. Thus, leaving the American population feeling confident and proud once more.

The Apollo, Mercury and Gemini programs led to many major technological advancements. Billions of dollars were invested into the development of technology in the years leading up to the and following the moon landing. Before Apollo, computers were huge in size and cumbersome to use. Due to the lack of space in the Apollo command module and lunar module, MIT and Fairchild Semiconductor created the Apollo Guidance Computer. It used integrated circuits and was one of the first computers that wasn't the size of a room. A variety of different technologies were invented in the duration of Apollo program, including cordless power tools and fire-resistant materials (that are now used by firemen).

The \$27 billion spent on getting a man to the moon had many benefits for the American economy. Over 500,000 people were employed by the space programs, directly or indirectly. By the mid-60s, NASA had a budget of over \$5 billion a year. This allowed for great economic growth. The technological developments allowed for even more economic growth. For example, the huge amounts of money spent on technological research allows the creation and economic prosperity of hugely successful, global corporations such as Apple and Microsoft. It was a sort of investment into the USA's industrial future. confident and proud once more.

The moon landing of 1969 was an exceptionally important event in the Cold War and history as a whole. The formation of NASA was one of the factors which made it possible. The Gemini and Mercury space programs developed technologies and discovered a lot of relevant, necessary information which allowed for the successes within the Apollo program. The Apollo program allowed American progress in space exploration to come along in leaps and bounds, and eventually allowed Apollo 11 to bring three men to the moon itself and home safely. The importance of this achievement is almost indescribable. It had a huge effect on foreign policy and it was a huge victory for America and democracy as a whole. The USSR faced it as a huge propaganda loss. Domestically, Americans regained feelings of confidence and pride in their country. The technological advancements were of huge importance for the whole world, with the developments made being unlike anything seen before. The moon landing and space programs allowed for strong economic growth within America. Lastly, the moon landing retaught people the value of our planet in its own way. The photographs of earth taken from space gave people a new perspective of the earth's beauty. They saw how small the planet and we are in comparison to the huge Galaxy. They realised how valuable our planet truly is and here we should care for it so much more. In my opinion, it was no coincidence that less than a year later the very first earth day was celebrated. In a strange, yet powerful way, the moon landing was of huge importance to the environmental movement of our generation.