Space Exploration: Dangers And Possibilities

The idea of space exploration has its own mystique and excitement. In fact, however, space poses many dangers to human beings. Without air, food and water, space is an unlivable environment. Life is full of people who are too hot or too cold. Potentially harmful radiation flows out of outer space in the form of cosmic rays, while electromagnetic waves come from the sun and other stars. Small pieces of rock and ice move at high speed through space, like small missiles. It was not until the 1950s that a proper combination of technology and skill emerged to overcome the obstacles of space travel. The political climate is just right. Two rich and powerful countries (the Soviet Union and the United States) spent their resources in space rather than defeating each other on the battlefield. It was this spirit of competition that propelled man from earth to the moon in 1969. With the gradual deterioration of the earth's environment and the rapid growth of its population, space exploration has become an urgent need rather than just for the exploration of the mysterious and unknown universe.

Until now, the technology for space exploration has been well developed, and many of the technologies developed for space exploration have started to affect people's own lives. Satellite systems, for example, prevent and monitor natural disasters. There was a big fire in California last year, and it burned about 20,000 acres, and fortunately it was contained, mainly because of the cooperation between NASA and the local government. NASA uses satellite technology such as MODIS and High-Resolution Rapid Refresh Smoke model to monitor the start of a fire and transmit it to the government. The government then arranges rescue and resettlement efforts based on these real-time images of the fires. Eventually, the fire was brought under control and greater damage was avoided. In addition, GPS was invented by satellite system scientists. Alastair (2017) said that GPS, the global positioning system, allows anyone with a receiver to find their position on earth within a few meters. It is benefits of this system, which will also soon be added to the European Galileo system, make deep navigation easier, faster and more accurate for aircraft and ships, saving lives in many cases, one may have the ability to lose the ability to have a GPS receiver that can detect their safety. Another benefit of the satellite system is that it can help direct agricultural productions. NASA USES the data from its satellites to analyze soil nutrients, water availability and weather. Through the analysis of these elements, they will be feedback to the farmer to guide the planting of crops. Finally, I think the most important point is that space exploration broadens people's mind and makes them not only confined to the earth. Especially Yuri Gagarin’s first moments in space and Neil Armstrong’s first step on the moon truly were ‘ giant leaps for mankind’.

The development of space exploration technology not only improves people's life quality, but also promotes economic development. A space industry is an innovative company which they can produce new products by space exploration getting the new knowledge and sources. Only continuous innovation can make an enterprise develop sustainably. Many international companies want to be involved. This creates healthy competition and encourages the company to develop more actively. In addition, the space industry as a new industry will generate many jobs, can reduce the unemployment rate. What is more, the mechanical industry developed through space exploration, such as robotics, is an innovative industry. Space exploration can not only develop industry, but also promote the development of the tertiary industry. People can travel in space as described in many science fiction movies and novels. Although it cannot be

achieved with the current space technology, it is bound to become one of the most popular industries once it appears. The main point, however, is that space exploration is becoming a global trend, and the rapid development of a country's economy means that it has the ability to plan for more sustainable space exploration. Finally, although space exploration is often the most expensive industry, it is certainly an industry worth investing in. Over the past 50 years, NASA technology has moved into medical, architectural, military and automotive applications. Everything from computers to solar power to GPS came from the space program, which shows that our investment has paid off.

Overcoming the challenges of working in space has led to many technological and scientific advances that have provided benefits to society on Earth in areas including health and medicine, transportation, public safety, consumer goods, energy and environment, information technology, and industrial productivity. These developments in space exploration have prompted us to develop more efficient and reliable systems to support them. And to do that, you have to be innovative. A further step is to promote coordination between humans and machines. This will allow machines to be greatly developed like robots. In the future, scientists will use robots to explore the universe instead of astronauts, which will greatly reduce the risk of space exploration. In addition to generating new technologies, advanced space control technologies can also drive the development of other technologies. Michael, Gary and Erik (2007) stated that as voyages of discovery multiplied and moved into uncharted territory, the need for advanced navigational techniques directed the practice of astronomy. But the rapid development of space technology has greatly reduced the risks of navigation. For example, when a ship is in danger at sea, rescue ships can greatly improve the rescue speed through the accurate positioning of GPS system. In addition, through the satellite system, the crew can more easily observe the flow of the river, wind direction and other issues. NASA's annual magazine Spinoff (2018) notes that space technology has improved disaster relief,for example, eliminating bacteria, viruses, molds and volatile, identifying the vital signs of disaster survivors trapped under rubble and improving designs for everything from running shoes to jetliners etc. In the end, I think the greatest contribution of space exploration to science is that it can stimulate the curiosity and exploration of young people, which enables people to make continuous progress in scientific development and explore new fields. In the long run, this impact will be critical for future generations.

Like a normal voyage of discovery, space exploration is a great and dangerous undertaking. It's full of unknowns and challenges. But for humans, it's all worth it. Space exploration not only improves people's life quality and economic development but also promotes the development of science and technology. And with the increasingly serious pollution of the earth and the rapid growth of the population, the gradual shortage of resources and the continuous deterioration of living environment have prompted us to need more energy and living environment to solve the problems we are facing now.

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