Space Exploration Essay, Research Paper

Since the beginning of time, man has been fascinated with the stars and sky. From the time the first man took his first step on the moon, space exploration has been growing and expanding. More and more people are coming up with new ways on how to study the universe. Hence, the more time spent on studying the sky, the more that we will obviously know. So, it would be safe to say that now is a great time to continue the exploration of space. The 1990 s contributed to the study of space with new technology, intelligent astronauts, and future ideas.

During the 1990 s new technology and space crafts were introduced. There have been numerous space launches throughout this decade that made great impacts on the exploration of space. For example, On June 26, 1995, the Space Shuttle Atlantis embarked on a rendezvous with Russian space station Mir during a ten day mission on STS-71 (Shipman 65). Cosmonauts were transferred to and from Atlantis, and Astronaut Norman Thagard was returned from Mir, having arrived on Soyuz-TM 21, and made a new American space endurance record of 115 days. This was huge for the astronomical community because of the increase in the length of space voyages. Also, On December 7, 1995, the Galileo spacecraft arrived at Jupiter, performing an orbit while dropping a probe into the atmosphere, and put a satellite into orbit, which will spent the next two years orbiting the planet (Shipman 72). This was important because it spent a significant amount of time researching the atmosphere and celestial bodies. It was able to make numerous observations during this time. Lastly, NASA launched the first in the Discovery series of spacecraft, the Near-Earth Asteroid Rendezvous (NEAR) spacecraft, aboard a Delta II-7925-8 rocket on February 17, 1996 (Shipman 85). This rocket explored the asteroids nearest the earth and discovered many interesting facts regarding them. However, this couldn t all be accomplished without the help of many talented people.

Many astronauts contributed to space exploration. Since there are numerous people that offered their talents to the program, it would be arduous to mention them all. Thus, only four important examples will be given of people that work for the space program. The first is James P. Bagian. James is a member of the Aerospace Medicine Association, the American Society of Mechanical Engineers, and the Society of NASA Flight Surgeons. He worked as a flight surgeon and medical officer at Lyndon B. Johnson Space Center, a NASA astronaut, and an Astronaut Office Coordinator. Under this title, he planned emergency medical and rescue support for the first six shuttle flights. He has spent a total of 337 hours in space and served on the Crew of STS-40 Spacelab Life Sciences, which is the first dedicated life sciences mission. (Jasani 113). Another famous astronaut is Tamara E. Jenigan. She participated in the American Astronomical Association. Even though her experience isn t as vast as James, she still contributed in her own way. She served as a research scientist in the Theoretical Studies Branch and performed software verification and spacecraft communication. She was the Deputy Chief of Astronaut Office and Assistant for the Station to the Chief of the Astronaut Office. She also embarked on many space flights on the Space Shuttle Colombia and the S.S. Endeavour. (Jasani 234). Phillippe Perin, another NASA astronaut of the 1990 s, did many exciting things as well. He participated in 26 combat missions, and completed more than 2500 flying hours in space. He had technical duties in the Astronaut Office Spacecraft Systems/Operations Branch. And, on top of all of this, he was a mission specialist. (Jasani 265). The last astronaut mentioned is Jeffrey N. Williams. He participated in many organization, however his most recognized is the Society of Experimental Test Pilots. He also partook in many army assignments including being an aeroscout platoon leader. He was involved in the shuttle launch and landing operations and was an engineer pilot in the Shuttle Avionics Integration Lab. Also, he was named the Chief of the Operations Development Office. This led to his involvement in the technical duties in the Astronaut Office Spacecraft System/Operations Branch. And, it was these people that came up with ideas for the future. (Jasani 288).

The 1990 s brought about many future ideas. While there are many different organizations that contribute to the future technology of space, NASA probably does the most. Under this organization, the Advanced Space Transportation Program supports the long-range basic research. This consists of airframe propulsion and long-term space transportation research. They have put forth many ideas. One example of this is the rocket engine. This would consume oxygen in the air and store liquid oxygen when it leaves the atmosphere (Glenn and Robinson 72). Hence, there would be significant savings because not as much propellant would be required to make it run. Another idea would be to launch rockets into space using laser beams. Laser Propulsion testing indicates a viable way to reduce money of sending men into space. Lastly, the Solar Thermal Propulsion is another idea for the future of space exploration. This would propel vehicles through space and significantly reduces weight, complexity, and money (Glenn and Robinson 104).

In conclusion, space exploration in the 1990 s has contributed a lot to the space age. With many new intelligent astronauts exploring the atmosphere and planets, the planetary sciences keep growing and growing. In fact, they keep continuing to add new ideas and inventions to the field. Also, more and more future ideas are being offered to make great improvements in the study. Hence, the 1990 s were a great year for the planetary scientists. However, more new inventions and ideas are still to come.