

Wednesday, January 28, 2004

## **A history of innovation and dreams**

# **The benefits of space exploration: science, technology and hope**

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In recent weeks, there has been more talk about the U.S. space program. Most of these discussions have been about the costs. Few people have talked about the long-term benefits from our well-funded Moon program of the 1950s through the end of the 1960s.

There were two significant benefits of our Moon program. The first was technological innovation. The space program created many new technologies that countries around the world now think nothing about. These include calculators and computers, which were at one time big enough to fill a room. Now computers are small enough to fit in the palm of one's hand or on one's lap.

In the late 1960s, only college students in engineering departments used calculators. By the middle of the 1970s, advanced calculators were available to anyone who could afford them. Also, computers in the 1980s became affordable to the middle class and the lower middle class.

Computer technology and communications/satellite technology also grew because of the space industry. Today, we have the Internet and cellular phones, which were just a dream forty or fifty years ago. These things have made our lives easier and safer, and have revolutionized public education.

Our space program has not been without its costs in human life. We mourn the deaths of Apollo astronauts Gus Grissom, Ed White and Roger Chaffee in 1967, and later the crews of two space shuttles. But at no time do we remember their families saying that we should stop because space travel was too dangerous or too expensive.

We believe in the space program because it gives us a daily opportunity to look beyond our life on this planet and imagine new ways of living. We would never say we have discovered answers to all of the mysteries of Earth. But the space program has given us new technologies that help us better understand our planet and improve our lives on it. We feel blessed to live at a time when space travel is possible.

# **The benefits of space exploration: science, technology and hope**

## **1. Identify hyphenated words.**

Long-term

Well-funded

## **2. Identify vocabulary.**

Significant

Benefit

Revolutionized

Mourn

## **3. Questions**

A. Are you for or against space exploration? Why or why not?

B. According to the article, what things did America's space program create that we use everyday?

C. Make two columns on a sheet of paper. In one column, list the reasons why space travel is important. In the other column, list the reasons why we should not travel into space. Share your paper with another student. Did the other student make you understand his or her reasons? Explain.