McCook Daily Gazette

NASA's future

Friday, September 18, 2009

By: Rep. Adrian Smith

Over the past 50 years, the research and technology developed by our country's National Aeronautics and Space Administration (more commonly known as NASA) has had a profound impact on nearly every American.

Our lives have been improved or even saved by digital hearing aids, miniature heart pumps, cancer detection devices, fire-resistant aircraft seats, and numerous other medical and safety devices and improvements which trace their origins to space technology.

Technology developed by our space program has resulted in more than 1,500 commercial products, including aerodynamic bicycle wheels, satellite radio, digital and satellite television, cell phone technology, cordless tools, and GPS navigation used by everyone from families on vacation to farmers and ranchers.

Space technology is responsible for rainwater purification systems for developing countries and oil spill control to help protect our environment.

In 2004, President George Bush unveiled the Vision for Space Exploration providing NASA a clear direction with measurable goals. Under this initiative NASA was directed to complete the International Space Station by 2010, enabling microgravity research into new vaccines and other promising bio-medical research, as well as research into the long-term effects of spaceflight on humans.

Now America has the opportunity to take the next step and move beyond low Earth orbit by re-establishing capabilities which have been lost since the 1970s, allowing us to return to the Moon and venture beyond.

Recently, the House Science and Technology Committee met to review options for the future of human space flight. It became clear our nation's human space flight program has the greatest chance of success if given clearly defined objectives, design requirements, and an adequate sustained investment by both the federal government and private entities.

Human spaceflight should be a source of pride for all Americans, and carries with it the promise of significant breakthroughs in health care, defense, and alternative energy technologies.

Of particular note is NASA's research into technology to produce biofuels from algae. Algae have the potential to provide as much as 2,000 gallons of fuel per acre, though it is difficult and expensive to grow using standard practices.

Algae grow very quickly, as anybody with a backyard garden or a watering tank in their pasture knows. In fact algae production rates can be more than five times those of land plants. Algae can be grown in many types of marine environments, including specially designed tanks, with minimal ecological impact.

NASA's research into algae-based fuel has the potential to reward us with a readily available and renewable resource to combat high prices at the gas station.

At a time in which technology moves forward at an astounding rate, the human space flight program serves as an inspiring example for students -- encouraging them to excel in math and science courses.

The work being done benefits science, education and the economy. The human exploration of space has led to such life-saving technologies as smoke detectors, laser heart surgery and the "jaws of life" while at the same time giving us Velcro and convection ovens.

Two prior Congresses and two presidential administrations have endorsed NASA's mission -- but failed to provide the necessary funds to accomplish the mission they have been tasked with.

Over the years, NASA has always managed to exceed expectations. Congress needs to meet the commitment to our nation's space agency. From the 1960s through today, NASA is an investment in our economy, in our country, and in our future.