

Spencer for the People  
P.O. Box 484  
Wilmington, DE 19899

April 27, 2010

President Barack Obama  
The White House  
1600 Pennsylvania Avenue  
Washington, DC 20500

Dear Mr. President,

We are concerned that the planned retirement this year of the nation's Space Shuttle fleet, your recent announcement to forgo a return of manned moon flights for missions to Mars and the shift of U.S. space transportation capability to the development of commercial vehicles fails to consider the two principals that have been essential to successful U.S. manned space flight for nearly 50 years - proficiency and redundancy.

Retirement of the Space Shuttles and eliminating the moon program will create a gap in space flight proficiency that will reduce the technical and flight safety capabilities essential for the demands of long duration space flight to Mars. In fact, continuing shuttle flights and development of a robust moon program will be necessary to preserve the continuity of 30,000 jobs whose technical proficiency would be difficult to recreate several years later.

Gaining proficiency from regular moon missions, eventually utilizing the spacecraft designed for Mars missions, will be necessary to confirm the readiness of equipment, astronauts and flight procedures for future Mars missions. In fact, several dress rehearsal missions, simulating a multi - year Mars mission within the relative safe return distance between the earth and the moon

would be vital before attempting to risk the unforgiving demands of a spacecraft traveling more than 100 million miles to Mars. Depending on Russian spacecraft until the development of U.S. commercial spacecraft is not without potential technical and political risks. Continued use of the Space Shuttle fleet, designed for more than 100 flights each, will provide America with vital space transportation redundancy to any difficulties with the use of Russian spacecraft or unforeseen delays in the development and testing of U.S. commercial spacecraft.

The Space Shuttle heavy lift and return capability is the only means available to support the space station and to assist in safely de-orbiting the massive structure if necessary in the future.

A robust manned space program, with specific missions, goals, objectives and deadlines is essential for NASA and U.S. advancement in science, technology, engineering and medicine and to inspire continued academic achievement and employment opportunities in these areas for American youth.

As we approach the 50th Anniversary of U.S. manned space flight in 2011, we urge that America maintain its gains of spaceflight proficiency and redundancy by keeping the Space Shuttles flying a minimum of three flights per year and that a specific schedule of manned moon missions resume by 2020, with ISS world partners and contributions, to provide a proving ground for lunar bases, deep space telescopes and future Mars missions.

Sincerely,

**Christopher C. Kraft**  
Former Director of NASA's  
Manned Spacecraft Center  
Houston, Texas

**Scott R. Spencer**  
Democratic Candidate  
for Congress  
Wilmington, Delaware