



1 HOUSE JOINT RESOLUTION

2 WHEREAS, The United States is a nation of explorers, and
3 exploration and discovery have been especially important to the
4 American experience, providing vision, hope, and economic
5 stimulus from new world explorers and American pioneers to the
6 Apollo program; and

7 WHEREAS, Just as Lewis and Clark could not have predicted
8 the settlement of the American west within a hundred years of
9 the start of their famous 19th century expedition, the total
10 benefits of a single exploratory undertaking or discovery
11 cannot be predicted in advance; the desire to explore is part
12 of our character, and history has shown that space exploration
13 benefits all humankind through new technologies for everyday
14 application, new jobs across the entire economic enterprise,
15 economic contributions through new markets and commercial
16 products, education and inspiration, United States leadership,
17 increased security, and a legacy for future generations; and

18 WHEREAS, New technologies and commercial spin-offs from
19 the advancements made through the National Aeronautics and
20 Space Administration (NASA) programs have provided economic
21 expansion and improved life quality to residents not only
22 within the United States but worldwide, and some of these
23 technologies include the following:

24 (1) Image processing used in CT scanners and MRI
25 technology came from technology developed to
26 computer-enhance pictures of the moon for the Apollo
27 program;

28 (2) Kidney dialysis machines were developed as a result
29 of a NASA-developed chemical process, and insulin pumps
30 were based on technology used on the Mars Viking
31 spacecraft;

32 (3) Programmable heart pacemakers were first developed
33 in the 1970's using NASA satellite electrical systems;

1 (4) Fetal heart monitors were developed from
2 technology originally used to measure airflow over
3 aircraft wings;

4 (5) Surgical probes used to treat brain tumors resulted
5 from special lighting technology developed for plant
6 growth experiments on space shuttle missions; and

7 (6) Infrared hand-held cameras used to observe
8 atmospheric gas plumes in space from the space shuttles
9 have helped firefighters point out hotspots in wild fires;
10 and

11 WHEREAS, Our nation's new vision for space exploration
12 charts a new building block strategy to explore destinations
13 across our solar system with robots and humans which will
14 significantly help the United States protect its technological
15 leadership, economic vitality, and security; and

16 WHEREAS, Implementation of the space exploration vision
17 will require private industry to have a larger presence in
18 space operations and the creation of a space-based industry;
19 and

20 WHEREAS, The talent, technology, and infrastructure exist
21 in Illinois to provide resources that will be key to
22 implementing the vision and carrying out NASA's future
23 missions; the State of Illinois has long played a leading role
24 in America's exploration initiatives, especially in our
25 nation's aeronautics and space program; Illinois is home to 15
26 active and former astronauts, including Eugene Sernan and Mae
27 Johnson, the first black woman in space; the State of Illinois
28 is a leader in science and technological research, hosting
29 federal laboratories such as Argonne National Labs and Fermi
30 National Accelerator Laboratory, and academic research
31 institutions such as the University of Chicago, Northwestern
32 University, and the University of Illinois; and

1 WHEREAS, NASA has invested over \$100 million in direct
2 funding to businesses and academic institutions in the State of
3 Illinois over the past 5 years; and

4 WHEREAS, NASA funds the NASA Illinois Commercialization
5 Center that, alone, has had a \$23 million economic benefit to
6 the Illinois business community over the past 3 years by
7 assisting private industry in the development and
8 commercialization of space-based technologies; and

9 WHEREAS, NASA's proposed vision has the potential to expand
10 NASA's economic impact in the State of Illinois, becoming a
11 catalyst for innovation and discovery in support of the vision
12 that will contribute to local and national economic growth;
13 therefore, be it

14 RESOLVED, BY THE HOUSE OF REPRESENTATIVES OF THE
15 NINETY-FOURTH GENERAL ASSEMBLY OF THE STATE OF ILLINOIS, THE
16 SENATE CONCURRING HEREIN, That the State of Illinois support
17 the continuation of research and development programs in space
18 science missions in order to take full advantage of the
19 previous investments made in the space stations and other NASA
20 infrastructure, support NASA's goal of returning to the moon as
21 well as conducting excursions to Mars and beyond, and encourage
22 the United States Congress to enact and fully fund the proposed
23 Vision for Space Exploration Program as submitted to the
24 Congress in the federal 2005 fiscal year budget, to enable the
25 United States and the State of Illinois, in particular, to
26 remain a leader in the exploration and development of space;
27 and be it further

28 RESOLVED, That the clerk transmit copies of this Resolution
29 to the President and Vice President of the United States, to
30 the Speaker of the House of Representatives of the Congress of
31 the United States, to the Majority Leader of the Senate of the
32 Congress of the United States, and to each Senator and

1 Representative from the State of Illinois in the Congress of
2 the United States.