AMENDED IN SENATE JUNE 29, 2004 AMENDED IN ASSEMBLY JUNE 1, 2004

CALIFORNIA LEGISLATURE—2003-04 REGULAR SESSION

Assembly Joint Resolution

No. 86

Introduced by Assembly Member Lieber (Principal coauthors: Assembly Members Harman, Liu, Maldonado, and Runner)

(Principal coauthors: Senators Ashburn, Hollingsworth, and Scott)
(Coauthors: Assembly Members Benoit, Bermudez, and Levine)
Chavez, Levine, and Mountjoy)

May 18, 2004

Assembly Joint Resolution No. 86—Relative to space exploration.

LEGISLATIVE COUNSEL'S DIGEST

AJR 86, as amended, Lieber. Space exploration.

This measure would request that the Congress and the President of the United States enact and fully fund the proposed budget for space exploration for the federal 2005 fiscal year to enable the United States, and California, in particular, to remain a leader in the exploration and development of space.

Fiscal committee: no.

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

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 WHEREAS, Just as Lewis and Clark could not have predicted the settlement of the American west within a hundred years of the start of their famous 19th century expedition, the total benefits of a single exploratory undertaking or discovery cannot be predicted in advance; and

WHEREAS, The desire to explore is part of our character, and history has shown that space exploration benefits all humankind through new technologies for everyday application, new jobs across the entire economic enterprise, economic contributions through new markets and commercial products, education and inspiration, United States leadership, increased security, and a legacy for future generations; and

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

- (a) Image processing used in CT scanners and MRI technology came from technology developed to computer-enhance pictures of the moon for the Apollo program.
- (b) Kidney dialysis machines were developed as a result of a NASA-developed chemical process, and insulin pumps were based on technology used on the Mars Viking spacecraft.
- (c) Programmable heart pacemakers were first developed in the 1970's using NASA satellite electrical systems.
- (d) Fetal heart monitors were developed from technology originally used to measure airflow over aircraft wings.
- (e) Surgical probes used to treat brain tumors resulted from special lighting technology developed for plant growth experiments on space shuttle missions.
- (f) Infrared hand-held cameras used to observe atmospheric gas plumes in space from the space shuttles have helped firefighters point out hot spots in wild fires; and
- WHEREAS, This state has been a leader in the research, design, exploration, and development of space enterprise since the dawn of the space age; and
- WHEREAS, Space is a \$24.2 billion enterprise in this state and generates 133,000 direct and indirect jobs scattered throughout the entire state; and

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WHEREAS, Our nation's new vision for space exploration charts a new, building block strategy to explore destinations across our solar system with robots and humans, allowing our nation to remain competitive in the new industry of space commerce; and

WHEREAS, The research and development necessary to rely on the initial robotics goal is uniquely suited for the three NASA centers located in our state; and

WHEREAS, The three NASA centers in this state—Ames Research Center in Santa Clara County, Dryden Flight Research Center in the-Antelope Valley, and the Jet Propulsion Laboratory in Pasadena–La Cañada Flintridge jointly employ over 7,250 people and maintain a payroll in excess of \$300 million; and

WHEREAS, NASA's economic benefit to this state already tops \$3 billion annually, including over \$175 million worth of science and engineering grants to California's public and independent universities, and the proposed vision for space exploration is expected to strengthen this economic impact; now, therefore, be it

Resolved by the Assembly and Senate of the State of California, jointly, That the Congress and the President of the United States is requested to enact and fully fund the proposed budget for space exploration, as submitted to the Congress in the federal 2005 fiscal year budget, to enable the United States and California, in particular, to remain a leader in the exploration and development of space; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the President and Vice President of the United States, to the Speaker of the House of Representatives, to the Majority Leader of the Senate, and to each Senator and Representative from California in the Congress of the United States.