



SENATE JOINT RESOLUTION 16-022

BY SENATOR(S) Baumgardner and Todd, Aguilar, Carroll, Cooke, Crowder, Donovan, Garcia, Grantham, Heath, Hill, Hodge, Holbert, Jahn, Johnston, Jones, Kefalas, Kerr, Lambert, Lundberg, Marble, Martinez Humenik, Merrifield, Neville T., Newell, Roberts, Scheffel, Scott, Sonnenberg, Steadman, Tate, Ulibarri, Woods, Cadman;

also REPRESENTATIVE(S) Rosenthal and Nordberg, Arndt, Becker J., Becker K., Brown, Buck, Buckner, Carver, Conti, Coram, Court, Danielson, DelGrosso, Dore, Duran, Esgar, Everett, Fields, Foote, Garnett, Ginal, Hamner, Humphrey, Joshi, Kagan, Klingenschmitt, Kraft-Tharp, Landgraf, Lebsock, Lee, Leonard, Lontine, Lundeen, McCann, Melton, Mitsch Bush, Moreno, Navarro, Neville P., Pabon, Pettersen, Primavera, Priola, Rankin, Ransom, Roupe, Ryden, Salazar, Sias, Singer, Thurlow, Tyler, Van Winkle, Vigil, Willett, Williams, Wilson, Windholz, Winter, Wist, Young, Hullinghorst.

CONCERNING THE DESIGNATION OF MARCH 21, 2016, AS "COLORADO AEROSPACE DAY".

WHEREAS, Our nation and the world have significantly benefitted from technological and scientific advances resulting from space exploration and aerospace activities; and

WHEREAS, Colorado is the number one state in the country for private aerospace employment per capita and ranks second in total private sector aerospace employment; more than 25,000 Coloradans are directly employed in aerospace, with a payroll exceeding \$3.2 billion and with more than 162,000 other aerospace related jobs; and

WHEREAS, Colorado is home to the nation's top aerospace companies, including Ball Aerospace, Boeing, Harris Corporation, Lockheed Martin Space Systems, Northrop Grumman, Raytheon, Sierra Nevada, and United Launch Alliance, and close to an additional 500 space-related companies that develop products, including spacecraft, launch vehicles, satellites, command and control software, sensors, and

navigation operations; and

WHEREAS, This year, Ball Aerospace is celebrating the 60th anniversary of its founding in Colorado, and Lockheed Martin is celebrating the 60th anniversary of the groundbreaking for its Waterton Canyon Facility in Jefferson County; this year also marks the Boeing Company's one hundredth anniversary, and Colorado is the home of Boeing projects that include the Ground-based Midcourse Defense (GMD) system, the nation's only homeland defense against long-range ballistic missile attacks; and

WHEREAS, Colorado, led by the Southwest Research Institute, is a significant contributor to NASA's New Horizons spacecraft, which successfully reached Pluto on July 14, 2015, after a nine-year journey; contributions from Colorado companies include "Ralph", the visual imager and infrared spectrometer built by Ball Aerospace in Broomfield, the radioisotope thermoelectric generator power system built by Lockheed Martin Space Systems Company in Littleton, and the Venetia Burney Student Dust Counter built by the University of Colorado Boulder; and

WHEREAS, Colorado is also home to United Launch Alliance, celebrating its tenth anniversary this year and headquartered in Centennial, which, on October 2, 2015, launched its 100th consecutive successful mission with an Atlas V rocket carrying the Morelos-3 satellite for Mexico's Ministry of Communications and Transportation, which rocket was procured for Mexico by Lockheed Martin Commercial Launch Services; and

WHEREAS, Colorado's MAVEN spacecraft, whose mission was developed by the Laboratory for Atmospheric and Space Physics at the University of Colorado Boulder, was built by Lockheed Martin and launched by United Launch Alliance, in 2015 identified the process that appears to have played a key role in the transition of the Martian climate from an early, warm and wet environment that might have supported surface life to the cold, arid planet Mars is today, yielding information that may help us to better understand our own planet; and

WHEREAS, Colorado's universities, including the University of Colorado Boulder and University of Colorado Colorado Springs, Colorado School of Mines, Colorado State University, Metropolitan State

University of Denver, University of Denver, and Colorado Mesa University, are among the world's best for aerospace-related degrees and offer aerospace companies one of the country's most educated workforces; and

WHEREAS, University of Colorado Boulder is producing Colorado's aerospace leaders, with a top-ten ranked department of aerospace engineering sciences; more than \$100 million annually in aerospace-related research; the Laboratory for Atmospheric and Space Physics, the only research institute in the world to send missions to all eight planets and Pluto; the statewide NASA-funded Colorado Space Grant program; more than a dozen aerospace-related academic units; 18 alumni who became astronauts; and the recently launched "Our Space, Our Future" initiative that aims to fuse CU's unique strengths in Earth, space, and social sciences with new technologies and partners to effectively and rapidly address the pace and pattern of changes for our planet, resources, and environment; and

WHEREAS, Colorado is home to NOAA's Space Weather Prediction Center, a world-leading center of predictions of the solar and near-Earth space environment and the nation's official source of watches, warnings, and alerts of incoming solar storms; NOAA's National Centers for Environmental Information, the authoritative steward of operational space weather data; NOAA's OAR Earth Systems Research Laboratory, which relies on satellite data to inform weather and research models; and three National Weather Service Weather Forecast Offices, which use satellite observations to protect and save lives and property; and

WHEREAS, Colorado is also home to the United States Air Force Academy, which designs, builds, launches and controls small satellites, including FalconSat-6, and has graduated thirty-nine astronauts and is number two in aeronautical and astronautical programs for 2015, a position it maintains for the fourteenth consecutive year; and

WHEREAS, Colorado is a strategic location for national space and cyber activity, with five key military commands--North American Aerospace Defense (NORAD), the United States Northern Command (USNORTHCOM), the U.S. Strategic Command's Joint Functional Component Command for Space (JFCC-Space) Missile Warning Center, the United States Air Force Space Command, and the U.S. Army Space

and Missile Defense Command/Army Forces Strategic Command--and three space-related United States Air Force bases--Buckley, Peterson, and Schriever; and

WHEREAS, The U.S. Air Force Space Command in Colorado Springs provides operational control of the Global Positioning System (GPS), a service provided free to the world by Air Force Space Command and an integral part of our global economy with an incalculable impact that has improved the everyday lives of billions of people around the world; and

WHEREAS, In 2015, the Colorado aerospace industry and the U.S. Air Force Space Command celebrated twenty years since the GPS was declared fully operational, and Colorado leads the charge in bringing current and future GPS assets to life, from the operation of GPS satellites by Schriever Air Force Base, to GPS III, the most powerful GPS satellite to date, being designed and built by Lockheed Martin, with Raytheon developing the command and control capabilities, while companies such as Boeing, Harris Corporation, Braxton Technologies, and Infinity Systems Engineering are also supporting GPS development and operations from locations in Colorado; and

WHEREAS, The 460th Space Wing at Buckley Air Force Base, located in Aurora, provides operational command and control of three constellations of space-based infrared missile warning systems and has been defending America continuously since 1970 and is a critical part of global defense and national security; and

WHEREAS, Key to Colorado's prominence in aerospace are two organizations: First, the Colorado Space Coalition (CSC) is a group of industry stakeholders working to make Colorado a center of excellence for aerospace; CSC members, including space companies, military leaders, academic organizations, research centers, and economic development groups, promote Colorado's significant space assets and advance legislation vital to industry growth and success; and, second, the Colorado Space Business Roundtable, working to bring together aerospace stakeholders from the industry, government, and academia for roundtable discussions and business development and to encourage grassroots citizen participation in aerospace issues; and

WHEREAS, The Colorado Chapter of Citizens for Space Exploration

is working to promote better understanding of aerospace and its importance in our economy and daily lives as well as promoting the importance of human space exploration; now, therefore,

Be It Resolved by the Senate of the Seventieth General Assembly of the State of Colorado, the House of Representatives concurring herein:

(1) That we strongly urge and request the government of the United States of America to take action to preserve and enhance United States leadership in space, spur innovation, and ensure our continued national and economic security by increasing funding for space exploration and activities, including regaining the ability of the United States to deliver astronauts to low earth orbit by 2017; to commit to sending astronauts to the moon, Lagrange points, and asteroids within this decade; and to aggressively pursue NASA's Orion spacecraft and Space Launch System to get astronauts to Mars by 2035;

(2) That we recognize and appreciate Colorado's space and aerospace companies and organizations, especially the growing membership and activities of the Colorado Chapter of Citizens for Space Exploration, whose activities to promote space exploration are helping to increase public understanding and enthusiasm for exploration funding;

(3) That we recognize and appreciate the contributions of Colorado's universities, colleges, and national research laboratories to the space and aerospace industries, including their expertise in exploration of the planets and the universe and space-based Earth observation;

(4) That we express our most sincere and deepest appreciation to the men and women working in and supporting military and civilian aerospace companies and organizations in Colorado; and

(5) That we hereby declare March 21, 2016, to be "Colorado Aerospace Day".

Be It Further Resolved, That copies of this Joint Resolution be sent to President Barack Obama; Speaker Paul D. Ryan; House Minority Leader Nancy Pelosi; Senate Majority Leader Mitch McConnell; Senate Minority Leader Harry Reid; Senator Cory Gardner; Senator Michael Bennet; Congresswoman Diana DeGette; Congressman Jared Polis; Congressman

Scott Tipton; Congressman Ken Buck; Congressman Doug Lamborn; Congressman Mike Coffman; Congressman Ed Perlmutter; Charles F. Bolden, Jr., NASA Administrator; Dava Newman, NASA Deputy Administrator; Mr. Michael P. Huerta, Federal Aviation Administration Administrator; Governor John Hickenlooper; Lieutenant Governor Joe Garcia; Major General H. Michael Edwards, the Adjutant General, Colorado National Guard; Dr. George C. Nield, Associate Administrator for Commercial Space Transportation at the Federal Aviation Administration; General John Hyten, Air Force Space Commander; Colonel Dan Wright, USAF, Commander Aerospace Data Facility-Colorado; Betty Sapp, Director, National Reconnaissance Office; Charles Huettner, Executive Director, Aerospace States Association; Elliott Pulham, Chief Executive Officer, Space Foundation; Major General (Retired) Andy Love, Co-Chair, Colorado Space Coalition; Tom Marsh, Co-Chair, Colorado Space Coalition; Edgar Johansson, President and CEO, Colorado Space Business Roundtable; Frank Backes, Chair, Colorado Space Business Roundtable; and Stacey DeFore, Chair, Colorado Citizens for Space Exploration.

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THE SENATE

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SPEAKER OF THE HOUSE
OF REPRESENTATIVES

Effie Ameen
SECRETARY OF
THE SENATE

Marilyn Eddins
CHIEF CLERK OF THE HOUSE
OF REPRESENTATIVES