

Second Regular Session
Seventieth General Assembly
STATE OF COLORADO

ENGROSSED

LLS NO. R16-0351.02 Joel Moore x4497

SJR16-022

SENATE SPONSORSHIP

Baumgardner and Todd,

HOUSE SPONSORSHIP

Rosenthal and Nordberg,

Senate Committees

House Committees

SENATE JOINT RESOLUTION 16-022

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

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

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

9 WHEREAS, Colorado is home to the nation's top aerospace

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.
Capital letters indicate new material to be added to existing statute.
Dashes through the words indicate deletions from existing statute.

SENATE
Final Reading
March 21, 2016

1 companies, including Ball Aerospace, Boeing, Harris Corporation,
2 Lockheed Martin Space Systems, Northrop Grumman, Raytheon, Sierra
3 Nevada, and United Launch Alliance, and close to an additional 500
4 space-related companies that develop products, including spacecraft,
5 launch vehicles, satellites, command and control software, sensors, and
6 navigation operations; and

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

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

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

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

1 WHEREAS, Colorado's universities, including the University of
2 Colorado Boulder and University of Colorado Colorado Springs,
3 Colorado School of Mines, Colorado State University, Metropolitan State
4 University of Denver, University of Denver, and Colorado Mesa
5 University, are among the world's best for aerospace-related degrees and
6 offer aerospace companies one of the country's most educated
7 workforces; and

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

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

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

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

1 the United States Air Force Space Command, and the U.S. Army Space
2 and Missile Defense Command/Army Forces Strategic Command--and
3 three space-related United States Air Force bases--Buckley, Peterson, and
4 Schriever; and

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

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

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

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

37 WHEREAS, The Colorado Chapter of Citizens for Space

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

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

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

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

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

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

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

29 *Be It Further Resolved*, That copies of this Joint Resolution be sent
30 to President Barack Obama; Speaker Paul D. Ryan; House Minority
31 Leader Nancy Pelosi; Senate Majority Leader Mitch McConnell; Senate
32 Minority Leader Harry Reid; Senator Cory Gardner; Senator Michael
33 Bennet; Congresswoman Diana DeGette; Congressman Jared Polis;
34 Congressman Scott Tipton; Congressman Ken Buck; Congressman Doug
35 Lamborn; Congressman Mike Coffman; Congressman Ed Perlmutter;

1 Charles F. Bolden, Jr., NASA Administrator; Dava Newman, NASA
2 Deputy Administrator; Mr. Michael P. Huerta, Federal Aviation
3 Administration Administrator; Governor John Hickenlooper; Lieutenant
4 Governor Joe Garcia; Major General H. Michael Edwards, the Adjutant
5 General, Colorado National Guard; Dr. George C. Nield, Associate
6 Administrator for Commercial Space Transportation at the Federal
7 Aviation Administration; General John Hyten, Air Force Space
8 Commander; Colonel Dan Wright, USAF, Commander Aerospace Data
9 Facility-Colorado; Betty Sapp, Director, National Reconnaissance Office;
10 Charles Huettner, Executive Director, Aerospace States Association;
11 Elliott Pulham, Chief Executive Officer, Space Foundation; Major
12 General (Retired) Andy Love, Co-Chair, Colorado Space Coalition; Tom
13 Marsh, Co-Chair, Colorado Space Coalition; Edgar Johansson, President
14 and CEO, Colorado Space Business Roundtable; Frank Backes, Chair,
15 Colorado Space Business Roundtable; and Stacey DeFore, Chair,
16 Colorado Citizens for Space Exploration.