

A BILL FOR AN ACT

RELATING TO THE INTERNATIONAL MOON BASE ALLIANCE.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

- 1 SECTION 1. The legislature finds that Hawaii possesses
- 2 strategic assets and capabilities that make the State a
- 3 potential giant in the space industry. Hawaii has a strategic
- 4 location near the equator in the middle of the Pacific Ocean,
- 5 resident expertise in aerospace technology, terrain that is like
- 6 the Moon and Mars, and long-standing ties with space-faring
- 7 nations worldwide. These features, among others, enable Hawaii
- 8 to join a global space enterprise that is expected to grow from
- 9 \$350 billion today to more than \$1.1 trillion by 2040.
- 10 Establishing Hawaii as a major player in the space industry now
- 11 means that its people will benefit from scientific, educational,
- 12 and commercial potential for generations to come.
- 13 For the past half-century, Hawaii has played a seminal role
- 14 in our national space program. Hawaii has provided astronaut
- 15 training for the Apollo lunar missions and world-class
- 16 observatories on the Big Island. Moreover, the University of
- 17 Hawaii, the United States military, and Hawaii-based companies

H.B. NO. 8 75

- 1 have pioneered nationally-funded programs in planetary
- 2 geosciences, satellite communications, space-based remote
- 3 sensing and environmental monitoring, deep-space surveillance,
- 4 and other cutting-edge applications of aerospace-related
- 5 technologies.
- 6 Recent research commissioned by NASA shows that the Moon
- 7 provides a logical steppingstone to future space exploration,
- 8 since it is nearby and contains abundant resources that can both
- 9 enable interplanetary travel and improve the quality of life on
- 10 Earth. New economic activity such as asteroid mining, space-
- 11 based solar power generation and the use of lunar resources
- 12 could enrich terrestrial civilization, help preserve the Earth's
- 13 fragile environment and ultimately enable sustainable human
- 14 exploration to Mars and beyond. A moon base that allows humans
- 15 to live on the surface of the moon to conduct research and
- 16 commercial operations, also known as an evolvable lunar
- 17 architecture, will enable humankind to develop lunar resources,
- 18 make new discoveries, and expand the near-term frontiers of
- 19 space exploration.
- 20 Sustainable space settlement will require advances in key
- 21 technologies beyond rocket propulsion, like life support

- 1 systems, telecommunications, power generation, and food
- 2 production. Testing these technologies on Earth will play an
- 3 indispensable role in their development and implementation. The
- 4 island of Hawaii's Moon-like terrain provides an ideal
- 5 environment for multinational teams to develop, test, and
- 6 validate technologies. Promoting Hawaii as a venue for this
- 7 research will create invaluable opportunities for local
- 8 scientists, engineers, entrepreneurs, and students.
- 9 The purpose of this Act is to create a committee called the
- 10 international moon base alliance comprised of representatives
- 11 from governmental, industrial, and research institutions to
- 12 provide recommendations and quidance for the development of a
- 13 prototype moon base on the island of Hawaii.
- 14 SECTION 2. The international moon base alliance shall
- 15 guide the development and implementation of a prototype Moon
- 16 base on the island of Hawaii. The alliance shall be composed of
- 17 representatives from:
- 18 (1) Hawaii-based organizations including but not limited
- 19 to the Hawaii aerospace advisory committee, the
- 20 Pacific international space center for exploration
- 21 systems, the Hawaii space flight laboratory at the

1		University of Hawaii at Manoa, and the Hawaii space
2		exploration analog and simulation program;
3	(2)	The National Aeronautics and Space Administration,
4		including but not limited to the Space Portal at the
5		Ames Research Center and the Exploration Integration
6		and Science Office at the Johnson Space Center;
7	(3)	Other appropriate federal agencies, including but not
8		limited to the Federal Aviation Administration, the
9		United States Pacific Command, and the United States
10		Army Pacific Command;
11	(4)	Other national space agencies worldwide;
12	(5)	The Lunar Exploration and Analysis Group;
13	(6)	The Universities Space Research Association, including
14		the Lunar and Planetary Institute;
15	(7)	Major corporations representing aerospace, information
16		technology, renewable energy, robotics, manufacturing,
17		and other appropriate industrial sectors;
18	(8)	National space advocacy organizations, including but
19		not limited to the National Space Society, the Lunar
20		Explorers Society, the Space Frontiers Foundation, and
21		the American Astronautical Society;

1	(9)	Global space agencies and organizations, including but	
2		not limited to the International Lunar Exploration	
3		Working Group, the International Space Exploration	
4		Coordination Group, and the Committee on Space	
5		Research; and	
6	(10)	The United Nations Office for Outer Space Affairs.	
7	SECT	ION 3. The international moon base alliance shall hold	
8	its first	organizational teleconference by August 1, 2019, and	
9	shall pre	sent a strategic plan for a prototype Moon base	
10	developme	ent to the governor and legislature prior to the	
11	convening	of the regular session of 2020.	
12	SECT	TION 4. There is appropriated out of the general	
13	revenues	of the State of Hawaii the sum of \$ or so much	
14	thereof as may be necessary for fiscal year 2019-2020 for the		
15	international moon base alliance to guide the development and		
16	implement	ation of a prototype Moon base on the island of Hawaii.	
17	The	sum appropriated shall be expended by the office of	
18	aerospace	e development for the purposes of this Act.	
19	SECT	TION 5. This Act shall take effect on June 1, 2019.	
20			

HB HMIA 2019-17-05

21

INTRODUCED BY:

Guleral

JAN 2 2 2019

Report Title:

Space Industry, Evolvable Lunar Architecture; Office of Aerospace Development

Description:

Promotes the space industry in Hawaii by creating an International Moon Base Alliance to provide recommendations and guidance for the establishment of a prototype moon base on the island of Hawaii.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.