

Board Summary

Bigelow Aerospace

1899 West Brooks Avenue, North Las Vegas, NV 89032
 Blair Bigelow, Vice President of Corporate Strategy
 Aerospace Manufacturing

Date: July 11, 2018
 Main Location: Carson City

Business Type: Expansion County: Clark County Development Authority Representative: Kylie Rowe - LVGEA

APPLICATION HIGHLIGHTS

- Bigelow Aerospace is considering expanding its current operations in North Las Vegas.
- The expansion would accommodate the company's new project: the development and manufacture of Bigelow Aerospace's flagship spacecraft, the B330, an entirely autonomous platform outfitted with two dissimilar propulsion systems and entire suite of environmental life support systems.
- The B330 is the only spacecraft of its kind being developed in the world.

PROFILE

Bigelow Aerospace is an American space technology company that manufactures and develops expandable space station modules. These NASA heritage systems are soft-bodied modules that launch in a compressed configuration but expand greatly once they reach space. Such inflatables provide for greater volume, safety, opportunity, and economy than the aluminum alternatives. Bigelow Aerospace's newest product, the B330, is a fully autonomous stand-alone space station which is complemented with a complete suite of life support systems, launches at 1/3 of the expanded size, provides 330 cubic meters of internal volume, and houses up to six crew members. To date the company has successfully launched two subscale spacecraft called Genesis I & II into orbit as well as the Bigelow Expandable Activity Module (BEAM), which is attached to the Tranquility module of the International Space Station. In October 2006, Bigelow Aerospace received the Innovator Award from the Arthur C. Clarke Foundation. This award recognizes 'initiatives or new inventions that have had recent impact on or hold particular promise for satellite communications and society, and stand as distinguished examples of innovative thinking.' In January 2007, the Space Foundation announced that Bigelow Aerospace would be the recipient of its 2007 Space Achievement Award. *Source: Bigelow Aerospace*

SIGNIFICANCE OF ABATEMENTS IN THE COMPANY'S DECISION TO RELOCATE/EXPAND

The economic development incentives offered by the State of Nevada have been an integral factor in Bigelow Aerospace's expansion strategy. The projected cost savings from the support of these incentives will allow the company to hire a greater number of full time employees, supporting the Governor's initiative for providing more Nevadan's with long term work and career opportunities. Additionally, Nevada's pro business climate provides Bigelow Aerospace with a sustainable location for ongoing strategic growth. *Source: Bigelow Aerospace*

REQUIREMENTS (TIER I)	Statutory	Application	Sufficient	% Over / Under
Job Creation (12 months)	5	5	Company meets abatement eligibility requirements	0%

REQUIREMENTS (TIER II)	Statutory	Application	Sufficient	% Over / Under
Average Wage	\$21.95	\$25.00	Company meets abatement eligibility requirements	14%

INVESTMENTS (NOT REQUIRED)	Description	Application
Equipment	20 yr (est)	\$51,261,000
Aviation Parts	20 yr (est)	\$6,515,000,000
Aircraft	20 yr (est)	\$0

INCENTIVES	Requested Terms	Estimated \$ Amount
Sales Tax Abmt. (Equip. & Parts)	Abated to 2% for 20 yrs.	\$157,266,313
Pers. Prop. Tax Abmt. (Eqp & Craft)	50% for 20 yrs.	\$1,458,125
Total		\$158,724,438

NEVADA BUSINESS LICENSE	Current	Pending	Will comply before receiving incentives
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

JOB CREATION	Contracted	12-Month Projection	5-Year Projection	10-Year Projection
	5	5	30	100

OTHER CAPITAL INVESTMENT	Land	Building Purchase	BTS / Bldg Imprv. (20 Yr)
	\$0	\$0	\$0

ECONOMIC IMPACT ESTIMATES (20-Year Cumulative)	Total
Total Jobs Supported	1,080
Total Payroll Supported	\$678,928,640
Total Output Estimate	\$2,098,834,589

Estimate includes jobs, payroll & output by the company assisted as well as the secondary impacts to other local businesses.

NEW TAX REVENUE ESTIMATES (20-Year Cumulative)	Direct	Indirect	Total
Local Taxes			
Property	\$1,382,510	\$19,556,198	\$20,938,708
Sales	\$0	\$12,356,238	\$12,356,238
Lodging	\$0	\$511,084	\$511,084
State Taxes			
Property	\$75,615	\$1,138,686	\$1,214,301
Sales	\$50,325,220	\$4,209,358	\$54,534,578
Modified Business	\$6,522,707	\$2,561,255	\$9,083,962
Commerce	NA	NA	NA
Lodging	\$0	\$172,491	\$172,491
Total	\$58,306,052	\$40,505,310	\$98,811,362

EMPLOYEE BENEFITS

- Percentage of health insurance covered by company: 65%.
- Health care package cost per employee - \$4,793 annually with options for dependents.
- Overtime, PTO/Sick/Vacation, Merit Increases, Retirement Plan / Profit Sharing / 401(k), Bonus.

NOTES

- The company is also considering Texas and Florida as potential locations.



June 1, 2018

Mr. Paul Anderson
Executive Director
Nevada Governor's Office of Economic Development
555 E. Washington Avenue, Suite 5400
Las Vegas, Nevada 89101

Dear Mr. Anderson,

Bigelow Aerospace is applying to the State of Nevada for the Aviation Tax Abatements. We request their application be placed on the agenda for the July 2018 GOED Board Meeting.

Bigelow Aerospace is exploring their options to expand operations in Southern Nevada by hiring 5 new employees over the next 12 months and make a capital investment of more than \$51 million dollars over the next twenty years.

Depending on the outcome of their application, leadership will decide on whether this expansion will happen in Southern Nevada or other locations, including Texas and Florida.

Our team has reviewed Bigelow's application and found it to comply with Nevada's statutory requirements for the aviation tax abatements. This application has the full support and endorsement of the Las Vegas Global Economic Alliance. We appreciate your consideration with this application.

Sincerely,

A handwritten signature in black ink, appearing to read "Perry Ursem", written over a horizontal line.

Perry Ursem
Vice President, Business Retention and Expansion

Enclosure

702.791.0000
800.634.6858

6720 VIA AUSTI PARKWAY, SUITE 330
LAS VEGAS, NEVADA 89119

LVGEA.ORG



May 9, 2018

Mr. Paul Anderson
Executive Director
Nevada Governor's Office of Economic Development
555 E. Washington, Suite 5400
Las Vegas, NV 89101

Dear Mr. Anderson,

By way of this letter and the attached application, Bigelow Aerospace is requesting tax incentives to assist with our expansion efforts in the state of Nevada. Recent strategic planning has the company focused on creating a greater presence in Nevada. A significant part of this consideration is the economic incentives offered by the state. We are projecting to add 5 full-time employees with an average wage of \$25 over the next year of operations.

A brief history of our company is attached. Headquartered in North Las Vegas, Nevada, Bigelow Aerospace has been making advances on NASA heritage expandable space station technology for over 15 years and holds 28 patents. This revolutionary architecture will be housing humans in space to support commercialization and exploration for decades to come. Bigelow Aerospace has successfully designed, built and launched three expandable habitats into space. One of which, BEAM, is the first and only commercially owned, human rated module of its kind, and it is located on the International Space Station.

Bigelow Aerospace's flagship spacecraft, the B330, is an entirely autonomous platform outfitted with two dissimilar propulsion systems and entire suite of environmental life support systems. This is the only spacecraft being developed of its kind in the world.

The economic development incentives offered by the State of Nevada have been an integral factor in our expansion strategy. The projected cost savings from the support of these incentives will allow Bigelow Aerospace to hire a greater number of full time employees, supporting the Governor's initiative for providing more Nevadan's with long term work and career opportunities. Additionally, Nevada's pro business climate provides Bigelow Aerospace with a sustainable location for ongoing strategic growth. We are currently optimizing and maximizing the space that we currently have in North Las Vegas.

Our experience with representatives from the Las Vegas Global Economic Alliance has been very positive and we look forward to your approval in supporting our expansion efforts. We appreciate for your time and consideration.

Sincerely,

A handwritten signature in black ink that reads "Blair Bigelow".

Blair Bigelow
Vice President of Corporate Strategy

Mayor
John J. Lee

Council Members
Isaac E. Barron
Pamela A. Goynes-Brown
Scott Black
Richard J. Cherchio



City Manager
Ryann Juden

Your Community of Choice

Office of the Mayor and City Council

2250 Las Vegas Boulevard, North · Suite 910 · North Las Vegas, Nevada 89030
Telephone: (702) 633-1007 · Fax: (702) 649-1302 ·

June 4, 2018

Mr. Paul Anderson
Executive Director
Nevada Governor's Office of Economic Development
808 West Nye Lane
Carson City, NV 89703

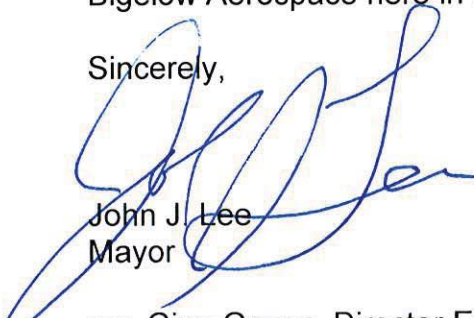
Dear Paul:

I am writing to express my full support for Bigelow Aerospace and their incentive application to be reviewed by the GOED Board at their next scheduled meeting.

Bigelow Aerospace has been a long-time member of the southern Nevada business community and I am pleased to see they continue to pursue extraordinary opportunities with NASA and the International Space Station. By way of their application, and approval by the GOED Board, Bigelow Aerospace will further invest abatement savings into human capital as they pursue development of an entirely autonomous spacecraft, the B330. Over the course of the next twenty years, Bigelow will in year one, initially hire 5 new employees and spend \$1.6 million in new capital equipment and in the subsequent years projects to hire up to 675 additional full-time staff and purchase an additional \$2.4 billion in aviation parts, all of which are outstanding.

It is my pleasure to support this application and I look forward to the continued success of Bigelow Aerospace here in North Las Vegas

Sincerely,


John J. Lee
Mayor

cc: Gina Gavan, Director Economic and Business Development



Mr. Paul Anderson
Executive Director
Nevada Governor's Office of Economic Development
555 E. Washington 808 W. Nye Lane
Carson City, NV 89703

RE: REQUEST FOR CONFIDENTIALITY OF RECORDS AND DOCUMENTS

Director Anderson:

On June 1, 2018, Bigelow Aerospace submitted an application to you as the Executive Director of the State of Nevada Governor's Office of Economic Development ("GOED") requesting approval of economic incentives for their new operation in Nevada. The purpose of this letter is to request confidentiality pursuant to Section 4 of Assembly Bill No. 17 (2015 Regular Session) as codified in NRS 231.069.

Please be advised Bigelow Aerospace specifically deems the following information proprietary and confidential:

- 1) The detailed schedule of Employment List
- 2) The detailed schedule of Capital Equipment List
- 3) The detailed schedule of Aviation Parts List

Thank you for your consideration. If you have any questions or require any further information, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in blue ink that reads "Blair Bigelow".

Blair Bigelow

REQUEST FOR CONFIDENTIALITY DETERMINATION

Pursuant to NRS 231.069, and upon the request of applicant Bigelow Aerospace the Executive Director of the Office has determined the:

- 1) The detailed schedule of Capital Equipment List – Schedule, 7(B)
- 2) The detailed schedule of Aviation Parts List, 7(C)
- 3) The detailed schedule of Employment List – Schedule, 7(E)

are confidential proprietary information of the business, are not public records, and shall be redacted in its entirety from the copy of the application that is disclosed to the public.



Paul Anderson
Executive Director

7/2/2018

Date

ECONOMIC DEVELOPMENT

Aviation Tax Abatement Incentive Application

Company is an / a: (check one)

- New location in Nevada
- Expansion of a Nevada company

Company Name: Bigelow Aerospace
 Date of Application: May 29, 2018

Section 1 - Type of Incentives

Please check all that the company is applying for on this application:

- Aviation Sales & Use Tax Abatement: abated to 2% up to 20 years (aircraft excluded) Other: _____
- Aviation Personal Property Tax Abatement (Equip): 50% for 20 years
- Aviation Personal Property Tax Abatement (Aircraft): 50% for 20 years

Section 2 - Corporate Information

COMPANY NAME (Legal name under which business will be transacted in Nevada) Bigelow Aerospace			FEDERAL TAX ID # 88-0418474
CORPORATE ADDRESS 1899 West Brooks Avenue	CITY / TOWN North Las Vegas	STATE / PROVINCE Nevada	ZIP 89032
MAILING ADDRESS TO RECEIVE DOCUMENTS (If different from above)	CITY / TOWN	STATE / PROVINCE	ZIP
TELEPHONE NUMBER 702-639-4440	WEBSITE www.bigelow aerospace.com		
COMPANY CONTACT NAME Blair Bigelow	COMPANY CONTACT TITLE Vice President of Corporate Strategy		
E-MAIL ADDRESS	PREFERRED PHONE NUMBER 702-639-4440		

Has your company ever applied and been approved for incentives available by the Governor's Office of Economic Development? Yes No

If Yes, list the program awarded, date of approval, and status of the accounts (attach separate sheet if necessary):

Section 3 - Job Creation Requirement

Please check the applicable category the company intends to qualify under with this application:

- New business: Create 5 or more full-time employees within 1 year after approval
- Existing business: Increase the number of full-time employees by 3% or 3, whichever is greater, within 1 year after approval

Section 4 - Program Elective Requirement

Please check **one** of the boxes below; the company must meet at least one elective requirement:

- New capital investment of at least \$250,000 in Nevada within 1 year after receiving certificate of eligibility
- Maintain and possess in Nevada tangible personal property having a value of not less than \$5,000,000 during the abatement period
- Average hourly wage for employees of the business shall be at or above the average statewide hourly wage
- The business develops, refines or owns a patent or other intellectual property, or has been issued a FAA certificate (14 CFR Part 21)

Section 5 - Program Restrictions

**NEVADA REGISTERED COMMON CARRIAGE OPERATIONS DO NOT QUALIFY FOR THIS TAX ABATEMENT
 UNLESS THE BUSINESS IS REGULATED UNDER 14 C.F.R. PART 125 or 135**

Section 6 - Nevada Facility

Type of Facility (Check all that apply):

- Headquarters Aircraft Manufacturing (Non-UAS)
- Aviation Maintenance Unmanned Aerial System Testing
- Air Tour Operators Unmanned Aerial System Manufacturing
- Business with Private Aircraft Other: _____

EXPECTED DATE OF NEW OPERATION (MONTH/YEAR) not applicable	EXPECTED DATE OF EXPANDED OPERATION (MONTH / YEAR) Jul-2018
NAICS CODE / SIC 541700	INDUSTRY TYPE Aerospace

DESCRIPTION OF COMPANY'S NEVADA OPERATIONS

Bigelow Aerospace is designing, manufacturing and testing expandable space stations for use in low Earth orbit and beyond.

PROPOSED / ACTUAL NEVADA FACILITY ADDRESS 1899 West Brooks Avenue	CITY / TOWN North Las Vegas	COUNTY Clark County	ZIP 89032
WHAT OTHER STATES / REGIONS / CITIES ARE BEING CONSIDERED FOR YOUR COMPANY'S RELOCATION / EXPANSION / STARTUP? Houston, Texas and Florida			

Section 7 - Complete Forms (see additional tabs at the bottom of this sheet for each form listed below)

Check the applicable box when form has been completed.

- | | |
|--|---|
| 7 (A) <input checked="" type="checkbox"/> Real Estate and Construction | 7 (E) <input checked="" type="checkbox"/> Employment Schedule |
| 7 (B) <input checked="" type="checkbox"/> Capital Equipment List | 7 (F) <input checked="" type="checkbox"/> Evaluation of Health Plan |
| 7 (C) <input checked="" type="checkbox"/> Aviation Parts List | |
| 7 (D) <input type="checkbox"/> Aircraft Procurement List | |

Section 8 - Employment (Fill in either New Operations/Startup or Expansion, not both)

New Operations / Start Up	Expansions
How many full-time equivalent (FTE*) employees will be created by the end of the first fourth quarter of new operations?: <u> n/a </u> Average hourly wage of these <u>new</u> employees: <u> n/a </u>	How many full-time equivalent (FTE*) employees will be created by the end of the first fourth quarter of expanded operations?: <u> 5 </u> Average hourly wage of these <u>new</u> employees: <u> \$25.00 </u> How many FTE employees prior to expansion?: <u> 159 </u> Average hourly wage of these <u>existing</u> employees: <u> \$36.32 </u> Total number of employees after expansion: <u> 164 </u>

* FTE means a person who is in a permanent position of employment, works and average of 30 hours per week, and is eligible for company-sponsored health benefits.

OTHER COMPENSATION (Check all that apply):

- | | | | |
|---|--|---|---|
| <input checked="" type="checkbox"/> Overtime | <input checked="" type="checkbox"/> Merit Increase | <input type="checkbox"/> Tuition assistance | <input checked="" type="checkbox"/> Bonus |
| <input checked="" type="checkbox"/> PTO / Sick / Vacation | <input type="checkbox"/> COLA adjustments | <input checked="" type="checkbox"/> Retirement Plan / Profit Sharing / 401(k) | <input type="checkbox"/> Other: _____ |

BRIEF DESCRIPTION OF ADDITIONAL COMPENSATION PROGRAMS AND ELIGIBILITY REQUIREMENTS (Attach a separate sheet if necessary):

The work week is 38 hours, and all employees receive 40 hours of pay which is equal to over two and half weeks of additional vacation every year. All employees also receive nine paid corporate holidays.

Section 9 - Employee Health Insurance Benefit Program

Is health insurance for employees and an option for dependents offered? Yes (copy of benefit plan must be attached) No

Package includes (check all that apply):

- Medical Vision Dental Other: _____

Qualified after (check one):

- Upon employment Three months after hire date Six months after hire date Other: _____

Health Insurance Costs:	Percentage of health insurance coverage by:	
Cost of health insurance for company (annual amount per employee):	\$ 4,793.18	Company: <u> 65% </u>
Health Plan annual out-of-pocket maximum (individual):	\$ 6,250.00	Employee: <u> 35% </u>

[SIGNATURE PAGE FOLLOWS]

Section 10 - Certification

I, the undersigned, hereby grant to the Governor's Office of Economic Development access to all pertinent and relevant records and documents of the aforementioned company. I understand this requirement is necessary to qualify and to monitor for compliance of all statutory and regulatory provisions pertaining to this application.

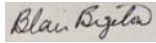
Being owner, member, partner, officer or employee with signatory authorization for the company, I do hereby declare that the facts herein stated are true and that all licensing and permitting requirements will be met prior to the commencement of operations. In addition, I and /or the company's legal counsel have reviewed the terms of the GOED Tax Abatement and Incentives Agreement, the company recognizes this agreement is generally not subject to change, and any material revisions have been discussed with GOED in advance of board approval.

Blair Bigelow

Name of person authorized for signature

Vice President of Corporate Strategy

Title



Signature

May 29, 2018

Date

Nevada Governor's Office of Economic Development
555 E. Washington Ave., Ste 5400 • Las Vegas, Nevada 89101 • 702.486.2700 • (Fax) 702.486.2701 • www.diversifynevada.com

Site Selection Factors

Company Name: Bigelow Aerospace

County: Clark County

Section I - Site Selection Ratings

Directions: Please rate the select factors by importance to the company's business (1 = very low; 5 = very high). Attach this form to the Incentives Application.

Availability of qualified workforce:	<u>2</u>	Transportation infrastructure:	<u>1</u>
Labor costs:	<u>3</u>	Transportation costs:	<u>1</u>
Real estate availability:	<u>5</u>	State and local tax structure:	<u>4</u>
Real estate costs:	<u>3</u>	State and local incentives:	<u>4</u>
Utility infrastructure:	<u>3</u>	Business permitting & regulatory structure:	<u>2</u>
Utility costs:	<u>3</u>	Access to higher education resources:	<u>1</u>

OTHER FACTORS & RATINGS:

7(A) Real Estate & Construction

Company Name: Bigelow Aerospace

County: Clark County

Section I - Real Estate & Constructions Projections

Directions: please provide a 20 year projection of the real estate costs for current year (year-1) and future land and building procurement, as well as, current and future annual lease amounts and possible construction costs due to building improvements. Complete [columns (a) and (f)]. These estimates are used for state economic impact and net tax revenue analysis that this agency is required to report. The company will not be required to reach these estimated levels of real estate costs. Attach this form to the Incentives Application.

(a) Year	(b) Land Cost	(c) Construction Cost	(d) Building Purchase	(e) Annual Lease Amount	(f) Building SqFt
Year-1	not applicable				
Year-2	not applicable				
Year-3	not applicable				
Year-4	not applicable				
Year-5	not applicable				
Year-6	not applicable				
Year-7	not applicable				
Year-8	not applicable				
Year-9	not applicable				
Year-10	not applicable				
Year-11	not applicable				
Year-12	not applicable				
Year-13	not applicable				
Year-14	not applicable				
Year-15	not applicable				
Year-16	not applicable				
Year-17	not applicable				
Year-18	not applicable				
Year-19	not applicable				
Year-20	not applicable				

Equipment Schedule, Detailed

The Office has determined the detailed equipment schedule as described in this application constitutes confidential proprietary information of proprietary information of Bigelow Aerospace and is not a public record.

Aviation Parts Schedule, Detailed

The Office has determined the detailed equipment schedule as described in this application constitutes confidential proprietary information of proprietary information of Bigelow Aerospace and is not a public record.

7(D) Aircraft Procurement List

Company Name: Bigelow Aerospace

County: Clark County

Section I - Future Aircraft Procurement List

Directions: please provide a 20 year projection of the aircraft the company anticipates purchasing, complete [columns (a) through (d)]. If there is a year where the company does not plan to purchase an aircraft, please list not applicable. These estimates are used for state economic impact and net tax revenue analysis that this agency is required to report. The company will not be required to reach these estimated levels of aircraft procurement. Attach this form to the Incentives Application.

Note: If the company does not anticipate purchasing aircraft, please leave this page blank.

(a) Year	(b) Aircraft Name/Description	(c) # of Aircraft	(d) Price per Aircraft	(e) Total Cost
Year-1	not applicable			
Year-2	not applicable			
Year-3	not applicable			
Year-4	not applicable			
Year-5	not applicable			
Year-6	not applicable			
Year-7	not applicable			
Year-8	not applicable			
Year-9	not applicable			
Year-10	not applicable			
Year-11	not applicable			
Year-12	not applicable			
Year-13	not applicable			
Year-14	not applicable			
Year-15	not applicable			
Year-16	not applicable			
Year-17	not applicable			
Year-18	not applicable			
Year-19	not applicable			
Year-20	not applicable			
Total				\$0.00

Section 2 - Existing Aircraft List

Directions: Please provide the current market value of all existing aircraft the company currently owns. If additional space is needed, attach a separate list to the application.

(a) Aircraft/Description	(b) # of Aircraft	(c) Current Market Value	(d) Total Cost
n/a	n/a	n/a	#VALUE!
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00

Employment Schedule, Detailed

The Office has determined the detailed equipment schedule as described in this application constitutes confidential proprietary information of proprietary information of Bigelow Aerospace and is not a public record.

SECRETARY OF STATE



NEVADA STATE BUSINESS LICENSE

BIGELOW AEROSPACE, LLC
Nevada Business Identification # NV19991012567

Expiration Date: February 28, 2019

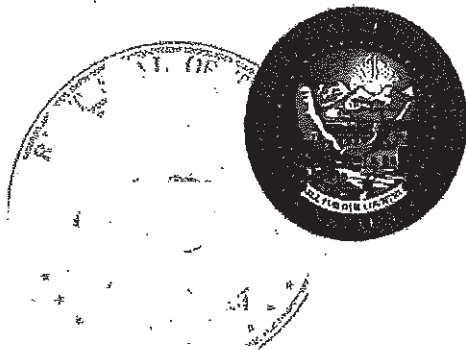
In accordance with Title 7 of Nevada Revised Statutes, pursuant to proper application duly filed and payment of appropriate prescribed fees, the above named is hereby granted a Nevada State Business License for business activities conducted within the State of Nevada.

Valid until the expiration date listed unless suspended, revoked or cancelled in accordance with the provisions in Nevada Revised Statutes. License is not transferable and is not in lieu of any local business license, permit or registration.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Great Seal of State, at my office on February 5, 2018



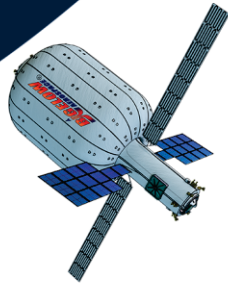
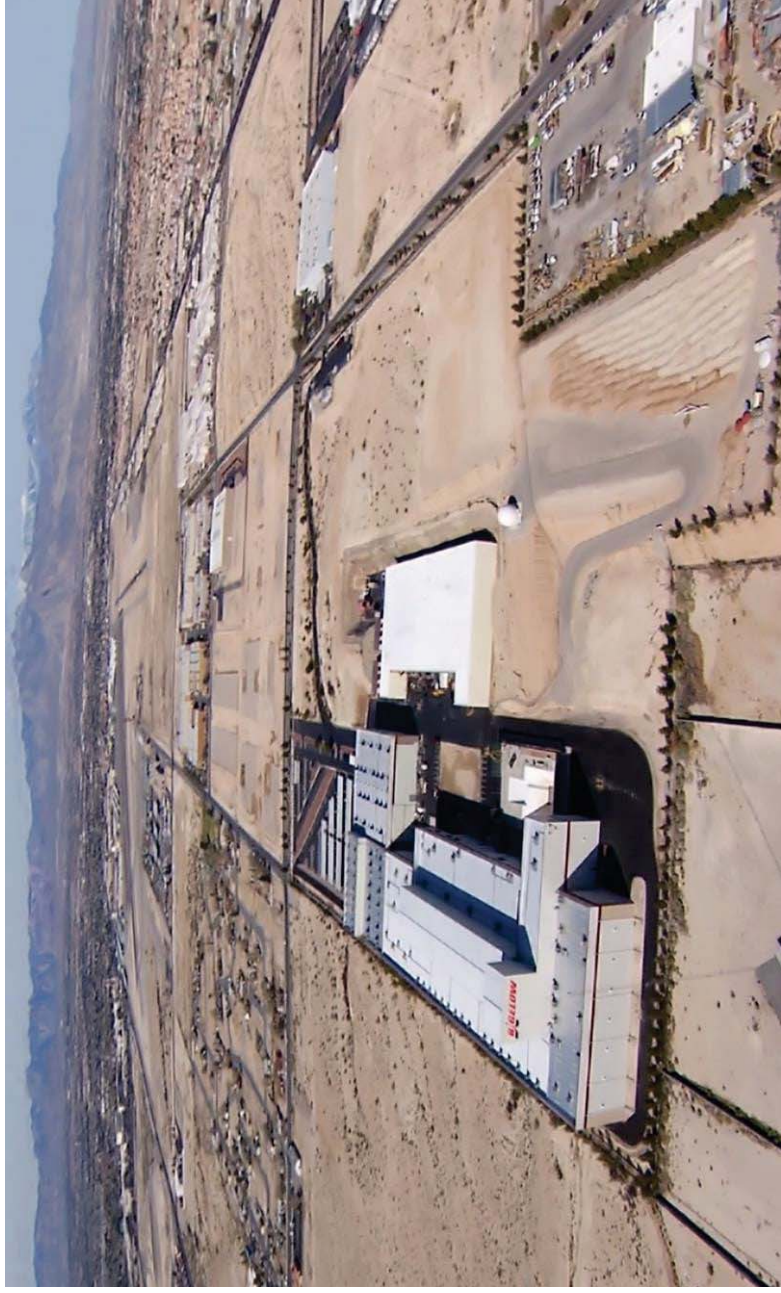
Barbara K. Cegavske
Secretary of State



You may verify this license at www.nvsos.gov under the Nevada Business Search.

License must be cancelled on or before its expiration date if business activity ceases. Failure to do so will result in late fees or penalties which by law cannot be waived.

Bigelow Aerospace



BIGELOW AEROSPACE PROPRIETARY
INFORMATION
© BIGELOW AEROSPACE, LLC 2018

June 11, 2018

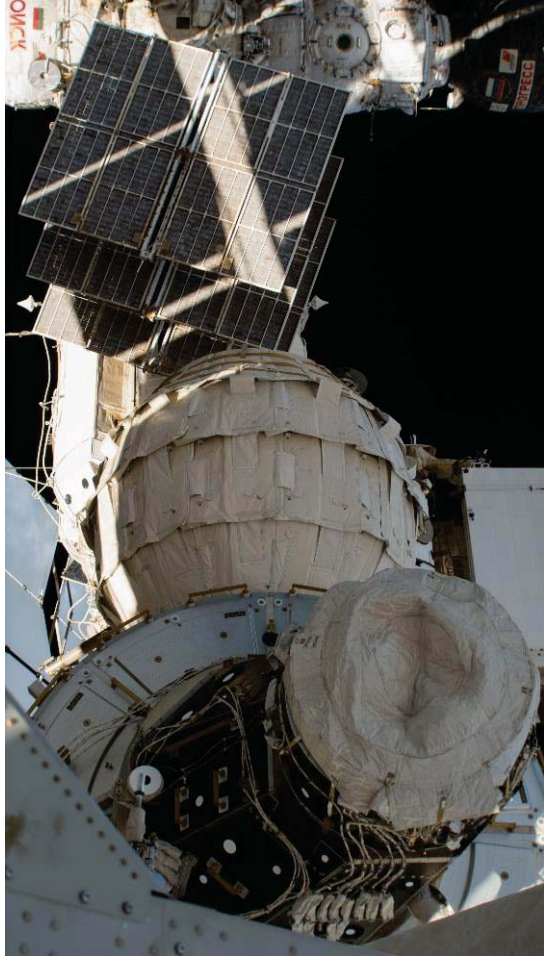
How It All Began

- The founder of Bigelow Aerospace, Robert Bigelow, is an experienced general contractor, designer, developer, financier, buyer and manager of many large real estate projects (including 23,000 apartments and numerous other complex commercial ventures).
- Mr. Bigelow first became aware of expandable habitat technology after reading a magazine article in early 1998 that described NASA's Transhab program. NASA had selected the innovative architecture of expandable enclosures for use as a habitat design that would carry people to Mars as part of President George H.W. Bush's Space Exploration Initiative ("SEI"). Due to a roughly \$500 billion price tag, SEI was never funded by Congress and was eventually abandoned.
- After learning about the Transhab's benefits and history, Mr. Bigelow, who had a lifelong passion to work on space-related topics, became intrigued by the technology, and in the spring of 1999, established Bigelow Aerospace in North Las Vegas to make expandable habitats a reality.



Space Heritage

- Bigelow Aerospace expandable habitat on-orbit demonstrations began with the launch of two pathfinder spacecraft, Genesis I and Genesis II.
- Launched in 2006 and 2007 respectively, these spacecraft validated the technology concept as well as Bigelow Aerospace’s engineering and manufacturing capabilities.
- In 2016, NASA launched the Bigelow Expandable Activity Module (“BEAM”) to the ISS and deployed the module on Node 3.
- BEAM made history as the first human-rated expandable module and the first commercially-owned module on ISS.
- The ingress of Astronaut Jeff Williams marked the commencement of BEAM’s two-year demonstration period on the ISS, during which BA will collect important data and, potentially, enable other commercial utilization pathways.



Benefits of Expandable Systems

- The benefits of expandable systems are numerous, with these structures offering much greater volume for mass than their metallic counterparts.
- The expandable softgoods structure launches in a compacted, high-density configuration, taking full advantage of available launch volume, which leads to dramatic savings in launch costs.
- Since the delivery of habitats to space is primarily limited by the scarcity and expense of launching payload mass and volume, technologies with such low mass-to-volume ratios are imperative to the extension of human activity in space.

