

05hr_SC-JCEDCA_sb0352_pt02



(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2005-06

(session year)

Senate

(Assembly, Senate or Joint)

Committee on ... Job Creation, Economic Development and Consumer Affairs (SC-JCEDCA)

COMMITTEE NOTICES ...

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)
(**ab** = Assembly Bill) (**ar** = Assembly Resolution) (**ajr** = Assembly Joint Resolution)
(**sb** = Senate Bill) (**sr** = Senate Resolution) (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

* Contents organized for archiving by: Mike Barman (LRB) (August/2012)

Senate Committee on Job Creation, Economic Development and Consumer Affairs
Hearing on Senate Bill 352, November 28, 2005

Support Testimony: Sheboygan Development Corporation, Sheboygan, Wisconsin

Represented at the Senate Hearing by:

Dennis Ladwig, SDC President, Executive Director, Lakeshore Technical College
Foundation, President Emeritus Lakeshore Technical College and

James Testwuide, SDC Member, President and CEO H.C. Denison Company

The Sheboygan Development Corporation (SDC) is a private organization led by local business leaders dedicated to economic development activities within the City of Sheboygan. The SDC is committed to increasing employment, enhancing the tax base, and making visual and aesthetic improvements via cooperation with the private sector and all levels of government.

The SDC supports development of the Wisconsin Aerospace Authority (WAA) in Sheboygan – primarily because the SDC recognizes the opportunity for the WAA to provide economic opportunity as well as unique regional destination for all ages to access the wonders of space travel, exploration and the future of aerospace technology in the Midwest.

Currently, the SDC is in the development stages of the *Great Lakes Aerospace & Science Education Center at Spaceport Sheboygan* which will be created within the existing City of Sheboygan Municipal Auditorium and Armory building just onshore from the existing restricted airspace and the proposed commercial spaceport. The location of the restricted airspace just off of Sheboygan's lakeshore, significant political (local leadership, State Representatives, NASA, Wisconsin Astronauts) and space education industry support (WSGC, Space Education Initiatives), has set the stage for economic growth of the aerospace industry and education in Sheboygan.

The *Great Lakes Aerospace & Science Education Center at Spaceport Sheboygan* will provide children and educators with enhanced educational opportunity specifically in the fields of math, science, engineering, and aerospace as well as expand the State of Wisconsin's economic position in the field of aerospace technology. This project is only conceivable as a destination in Sheboygan with the existence of the restricted airspace, and eventual commercial spaceport to be developed by the WAA. Approval of the WAA, through Bill 352, will allow Sheboygan to become Wisconsin's, and further, the Midwest's aerospace hub.

GREAT LAKES AEROSPACE SCIENCE & EDUCATION CENTER AT SPACEPORT SHEBOYGAN

LETTERS OF ENDORSEMENT

NOVEMBER 28, 2005

- ✦ James Lovell, Captain USN (Ret), Former US Astronaut
- ✦ Mark Lee, Colonel US Air Force (Ret), Former US Astronaut
- ✦ Dan Brandenstein, Captain USN (Ret), Former US Astronaut, Vice President and Program Manager Lockheed Martin Space Operations
- ✦ James Stofan, Director Informal Education Division NASA
- ✦ Michael Francis, Ph.D., Director Joint Unmanned Combat Air Systems Office, Defense Advanced Research Projects Agency
- ✦ R. Aileen Yingst, Ph.D., Director Wisconsin Space Grant Consortium
- ✦ Joe Leibham, State Senator 9th Senate District
- ✦ Glenn Grothman, State Senator 20th Senate District
- ✦ Steve Kestell, State Representative 27th Assembly District
- ✦ Terry Van Akkeren, State Representative 26th Assembly District
- ✦ Dan LeMahieu, State Representative 59th Assembly District
- ✦ Richard A. Bemis, President/Chief Executive Officer Bemis Manufacturing Company Sheboygan, Wisconsin
- ✦ Juan Perez, J.D., Mayor City of Sheboygan

**Lovell
Communications**

915 South Waukegan Road
Lake Forest, IL 60045

Phone: 847-234-8013
Fax: 847-234-5451
Email: love#13@prodigy.net

November 1, 2005

Mr. James A. Testwuide
H. C. Denison Company
618 N. 7th Street
Sheboygan, WI 53082-0028

Dear Mr. Testwuide:

I would like to express my support for the Spaceport Sheboygan Aerospace Science & Education Center. This project will provide a unique regional destination for aerospace discovery and education in the Midwest. At the Space port Sheboygan Aerospace Science & Education Center visitors of all ages will have access to the wonders of space travel and exploration developing aerospace technology.

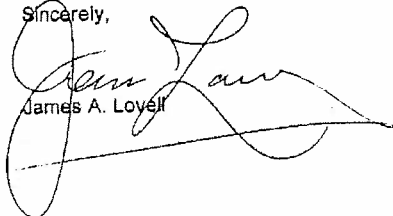
The Spaceport Sheboygan Aerospace Science & Education Center will fill an unmet need in the Midwest as it will:

- Position Wisconsin as a space transportation center with the Midwest's only developing Spaceport;
- Capitalize on the Midwest's existing aerospace research and technology assets;
- Promote math, science and engineering education in the Midwest; and
- Showcase new aerospace career opportunities and create a stronger central link between new graduates and aerospace companies throughout the region.

The convergence of educational institutions, private and non profit organizations, and specialists in the aerospace industry in Wisconsin's; along with the proximity of the only Midwest Spaceport in Sheboygan, Wisconsin provides a rare opportunity to create this compelling regional destination. This exciting project has the ability to boost the Midwest's transportation, education, economic development, and national defense program. Because of its importance and potential impact on the Midwest's economic and educational systems I ask that you give this project you're most thoughtful and serious consideration.

If I can be of further reference in this matter please feel free to contact me.

Sincerely,


James A. Lovell





MARK C. LEE
Program Manager

14 October 2005

To Whom It May Concern:

RE: Spaceport Sheboygan Aerospace Science and Education Center

As a young boy growing up in Wisconsin in the '60s, the Space Program and the journey to the moon captured my attention. From the time I was 9 years old I wanted to be an astronaut and once I attained that goal I have often looked back on what motivated and inspired me. Certainly growing up only a few miles from one of the original seven astronauts' (Deke Slayton) home town was a factor as well as the extensive local press coverage. I often thought about riding in an airplane or holding a moon rock and witnessing a launch seemed like a dream beyond the realm of possibility.

The Spaceport Sheboygan Aerospace Science and Education Center is a place where dreams of the next generation of space explorers can begin. Not only will it provide an opportunity for hands-on aerospace experience for visitors of all ages, it will become a place for teachers and parents to gain the knowledge about space they can pass along to their children and students. The exhibits, classrooms, theatre, planetarium, labs, and programs will inspire future astronauts, educators, and aerospace workers. I have given presentations to over a half-million students in the past 20 years. They love the space program and are excited about going back to the moon and mars. We need more places like Spaceport Sheboygan to foster this interest.

This opportunity for the upper Midwest is worthy of support and I ask that you give this project your most thoughtful and serious consideration. I am giving my full support to the development of this Spaceport Sheboygan Center and hope you will do the same. If I can be of further reference, please contact me at 608-229-2814 wk or 608-345-4964 cell and at leem@orbitec.com. Thanks for your attention and let's work together to make this center a reality.

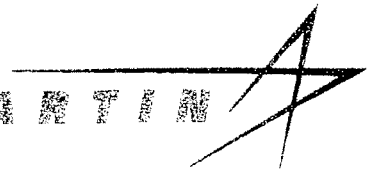
Sincerely,

A handwritten signature in black ink that reads "Mark C. Lee". The signature is written in a cursive, slightly slanted style.

Mark C. Lee

Colonel US Air Force (Ret)
Astronaut STS-30,47,64,82

LOCKHEED MARTIN



November 06, 2005

Mr. James Testwuide
Spaceport Sheboygan Space & Science Center
Sheboygan, WI 53082

Dear Mr. Testwuide:

On behalf of Lockheed Martin Space Operations, I am pleased to send a letter of endorsement in support of the Spaceport Sheboygan Space & Science Center.

Lockheed Martin is dedicated to supporting educational outreach efforts, specifically in the areas of math, science and engineering. We also strive to encourage public interest in space travel, space exploration, and the exciting future of aerospace technology.

The value of the Spaceport Sheboygan Space & Science Center is clear to me, as well as to my business unit and industry.

As a former astronaut who grew up in Wisconsin, I am certainly interested in the development of new establishments and centers that will highlight the importance of our human need to explore in search of greater knowledge. Additionally, as a Lockheed Martin Program Manager, I recognize the need for, and the value of, motivating and inspiring the next generation of engineers and scientists to facilitate the exploration initiatives. Having reviewed the preliminary business plan, I enthusiastically endorse the development of the Spaceport Sheboygan Space & Science Center.

I encourage you to work with Meghan Mariman, our Lockheed Martin Space Operations' Director of Communications, to involve other business units within the Lockheed Martin Corporation in your efforts to garner support and financial assistance. Meghan can be reached at 301-313-3915; Meghan.mariman@lmco.com.

As a representation of my personal endorsement, I would like to pledge an initial donation of \$2,500 from Lockheed Martin Space Operations.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Brandenstein".

Dan Brandenstein
Vice President and Program Manager
Lockheed Martin Space Operations

National Aeronautics and
Space Administration

Headquarters

Washington, DC 20546-0001



November 14, 2005

Reply to Attn of: Office of Education

Mr. Michael D. Muth
CEO
Muth Company
4221 High Tech Lane
P.O. Box 418
Sheboygan, Wisconsin 53082-0418

Dear Mr. Muth:

Thank you for taking time to come to Washington, DC, and to share with me the plans for development of the Great Lakes Aerospace Science and Education Center at Spaceport Sheboygan. Based on our discussion, the center and its proposed activities will provide a wonderful new asset to the Midwest, and your emphasis on engaging the next generation of explorers resonates with the mission of NASA.

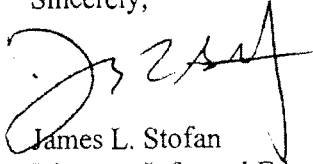
I am excited to see innovative programs developing that bring new informal education opportunities to this region. As our technological world changes, scientific literacy in the general population is essential to ensure that decisions affecting our daily lives are made wisely. Encouraging students at all levels to pursue careers in the fields of science, technology, engineering and mathematics (STEM) is crucial to strengthening the scientific literacy of the nation.

We have embarked on a bold new Vision for Space Exploration that will take us to the Moon, Mars and beyond. We are going on a great journey, not a race, to the stars. We will reach our goals in space the way we have reached so many others, one lift off, one voyage, one landing at a time. It is not too far fetched to believe that young people who will visit and interact with the Great Lakes Aerospace Science and Education Center will be inspired to go in space and take part in this vision.

The Center will offer a unique opportunity to open the public's eyes to the potential and to the wonders of the Vision for Space Exploration. By feeding the natural curiosity of our nation's young people, you are poised to capture and maintain their interest in the science, technology,

engineering and mathematics that will make the goals of the vision possible. As you continue to move forward with this informal education opportunity, I wish you the best of luck as you progress from concept to reality.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Stofan', written over a horizontal line.

James L. Stofan
Director, Informal Education Division

cc:

Gary Dulmes, President of Dulmes Decor Inc.



DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
3701 NORTH FAIRFAX DRIVE
ARLINGTON, VA 22203-1714

OCT 31 2005

To: Mr. Mike Muth

Subject: Endorsement of the Great Lakes Aerospace, Science, and Education Center at Spaceport Sheboygan.

Dear Mr. Muth:

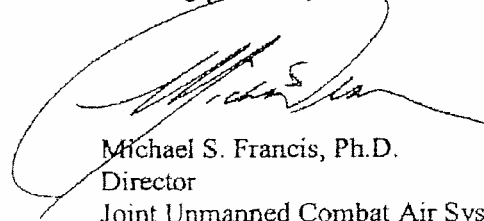
I wish to congratulate the organizers and developers of the **Great Lakes Aerospace, Science, and Education Center at Spaceport Sheboygan**, and add my endorsement to the growing list of aerospace professionals who recognize the significant opportunity afforded by the creation of this unique facility. The center and its proposed activities will provide a unique capability to the Midwest, as well as the nation, in the continuing quest for technical leadership, especially in the pivotal area of aerospace.

The new center will serve as a magnet for area residents and visitors – designed to educate all, motivate potential future scientists and engineers, and reinvigorate the enthusiasm for aerospace that existed in the early years of the space race. The first rate facility and staff will offer a hands-on, interactive experience complete with an IMAX theater and its trappings. State of the art exhibits will excite the imagination and stimulate curiosity. The comprehensive library will help visitors pursue the answers to their many questions. Your plan captures a noble vision ... an ability to motivate and inspire the next generation of young explorers toward the wonders and excitement of aerospace in a manner unparalleled in the region.

The site is highly appropriate, lying in close proximity to one of the designated commercial portals for space and in a city that hosts the "Rockets for Schools" program. It also provides easy access for a relatively large population segment in the Midwest. The region's high quality educational systems are well known, but the student population and their families are not generally acquainted with the opportunities in and challenges of aerospace, due to the lack of either industry or government presence in the region.

This unique center captures a vision that all of us in the aerospace community have for our future. It embraces what is best for our profession, for our country, and for humanity in the long term. I strongly endorse your efforts to bring your plan to reality, and to help create a legacy that will benefit the region and the nation for years to come.

Wishing you and your team the very best,



Michael S. Francis, Ph.D.
Director
Joint Unmanned Combat Air Systems Office



Wisconsin Space Grant Consortium

University of Wisconsin-Green Bay

Director

R. Aileen Yingst
Program Manager

Sharon D. Brandt
Education Liaison

Wayne Olm

Operations Coordinator
Sue Weiler

Program Office

Wisconsin Space Grant Consortium

University of Wisconsin-Green Bay

2420 Nicolet Drive, ES 317

Green Bay, WI 54311-7001

Phone: (920)465-2108

Fax: (920)465-2376

www.uwgb.edu/wsgc

Associate Directors

Thomas H. Achtor

University of Wisconsin-Madison

Sharon D. Brandt

Consortium Office

Thomas Bray

Milwaukee School of Engineering

Steven Dutch

University of Wisconsin-Green Bay

Vera Kolb

University of Wisconsin-Parkside

Eric Rice

Orbital Technologies Corporation

Chair of the Advisory Council

Gubbi R. Sudhakaran

University of Wisconsin-La Crosse

Members

Aerogel Technologies, LLC

AIAA - Wisconsin Section

Alverno College

Astronautics Corporation of America

BioPharmaceutical Technology Center Institute

Carroll College

College of the Menominee Nation

Great Lakes Spaceport Education Fnd, Inc.

KT Engineering

Lawrence University

Marquette University

Medical College of Wisconsin

Milwaukee School of Engineering

Orbital Technologies Corporation

PLANET LLC

Promega Corporation

Ripon College

Space Explorers, Inc.

University of Wisconsin-Fox Valley

University of Wisconsin-Green Bay

University of Wisconsin-La Crosse

University of Wisconsin-Madison

University of Wisconsin-Milwaukee

University of Wisconsin-Oshkosh

University of Wisconsin-Parkside

University of Wisconsin-Superior

University of Wisconsin-Whitewater

Wisconsin Association of CESA Administrators

Wisconsin Department of Public Instruction

Wisconsin Department of Transportation

Wisconsin Lutheran College

To Whom It May Concern:

On behalf of the Wisconsin Space Grant Consortium, I am pleased to write this letter in support of the Spaceport Sheboygan Space Education Center.

The Wisconsin Space Grant Consortium is part of a national organization of 52 state consortia funded by NASA to utilize the knowledge and excitement of the nation's space program to encourage and support science and technology development in each state. The Wisconsin Space Grant Consortium is dedicated to using the excitement and vision of space science and aerospace science to equip the citizens of Wisconsin with the math, science and technology tools they need to thrive in the next century. The Great Lakes Spaceport Education Foundation is an active member of our Consortium, which is made up of 32 university, not-for-profit, government and industry affiliates across the state of Wisconsin; our members are listed on this letterhead. Our consortium thus brings together many of the important state stakeholders in space and aerospace, and provides an excellent medium for both state- and nationwide dissemination of education materials.

The Wisconsin Space Grant Consortium is currently the interim Loan Site for all NASA education materials distributed in Wisconsin. We hope to be selected as the permanent Educator Resource Center for Wisconsin when NASA opens up this opportunity. Should this be the case, we would wish to make the Spaceport Sheboygan Space Education Center a point and distribution center for east-central Wisconsin, bringing all NASA education resources within reach of students in your region.

We enthusiastically support the establishment of the Spaceport Sheboygan Space Education Center and will be pleased to make our resources fully available to the organization.

Sincerely,

R. Aileen Yingst, Ph.D.
Director, Wisconsin Space Grant Consortium



WISCONSIN LEGISLATURE

P. O. Box 7882 Madison, WI 53707-7882

October 10, 2005

The Honorable Jim Doyle
Governor
State of Wisconsin
115 East State Capitol
Madison, WI 53708

Dear Governor Doyle:

We would like to express our strong support for the Spaceport Sheboygan Aerospace Science & Education Center. This project will provide a unique regional destination for aerospace discovery and education in the Midwest. At the Spaceport Sheboygan Aerospace Science & Education Center, visitors of all ages will have access to the wonders of space travel and exploration, and developing aerospace technology.

The Spaceport Sheboygan Aerospace Science & Education Center will fill an unmet need in the Midwest as it will:

- Position Wisconsin as a space transportation center with the Midwest's only developing Spaceport;
- Capitalize on the Midwest's existing aerospace research and technology assets;
- Promote math, science and engineering education in the Midwest; and
- Showcase new aerospace career opportunities and create a stronger central link between new graduates and aerospace companies throughout the region.

The convergence of educational institutions, private and nonprofit organizations, and specialists in the aerospace industry in Wisconsin; along with the proximity of the only Midwest Spaceport in Sheboygan, Wisconsin provides a rare opportunity to create this compelling regional destination. This exciting project has the ability to boost the Midwest's transportation, education, economic development and national defense programs. Because of its importance and potential impact on the Midwest's economic and educational systems, we ask that you give this project your most thoughtful and serious consideration.

Recently, we submitted Senate Bill (SB) 352 for consideration by the legislature. This legislation will create the Wisconsin Aerospace Authority (WAA) including Spaceport Sheboygan. Specifically, WAA will plan and execute a Spaceport in Sheboygan for the purpose of conducting aerospace services that promote, advance and facilitate space exploration and space-related commercial, technological and educational development.

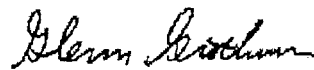
We look forward to visiting with you and your staff in the near future to discuss this legislation and the overall Spaceport Sheboygan Aerospace Science & Education Center. Your interest and support for this effort will be necessary and appreciated.

Please contact our offices if you have any questions or would like additional information. Again, we look forward to working with you on this positive economic development opportunity for Sheboygan County and our great state.

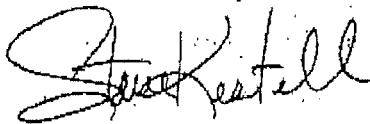
Sincerely,



Joe Leibham
State Senator
9th Senate District



Glenn Grotzman
State Senator
20th Senate District



Steve Kestell
State Representative
27th Assembly District



Terry Van Akkeren
State Representative
26th Assembly District



Dan LeMahieu
State Representative
59th Assembly District



Joe Leibham

State Senator
9th State Senate District

Capitol Connection
By Senator Joe Leibham
October 12, 2005

~ Legislation that is Out of this World ~

Recently, you may have heard of the proposal by a group of Sheboygan area citizens that are exploring the potential of developing an Aerospace Science and Education Center on Sheboygan's lakefront. The group proposes to convert the 63-year-old Sheboygan Armory into a space and science complex that would serve as a regional tourist and education destination.

The objective of the group is to develop a science and education center that will become the Midwest's resource for space travel and exploration, rocketry and science entertainment and education. The center would offer opportunities for larger-than-life adventure with hands-on activities, theatrical entertainment, and learning labs. The goal is to have the center offer a unique, fun and educational experience for people throughout the Midwest.

The Sheboygan lakeshore offers a unique location for this center due to the fact that it is designated by the federal government as restricted airspace and has been certified by the Wisconsin Department of Transportation as a site that has been approved for the construction of a public use spaceport. Currently, the Rockets for Schools program, which takes place on the Sheboygan lakeshore each spring, benefits from these designations.

While the proposal may sound somewhat "out of this world", it has great probability, possibility and promise. I have enjoyed working with the group that is developing this plan over the past three years and stand ready to assist, from a state government prospective, to make this dream a reality.

Recently, I was pleased to join Representative Steve Kestell (R-Elkhart Lake) in introducing Senate Bill (SB) 352. This legislation would create the Wisconsin Aerospace Authority (WAA) including an official designation for Spaceport Sheboygan. Specifically, under the legislation, the WAA will plan and execute a Spaceport in Sheboygan for the purpose of conducting aerospace services that promote, advance, and facilitate space exploration and space-related commercial, technological, and educational development.

The passage of this legislation and the creation of the WAA are necessary so that our state can receive federal funds that have been designated for aerospace science and education centers. These funds would be instrumental in the development of Sheboygan's space plan.

Representative Kestell and I have been joined in this effort by other area legislators and we recently asked Governor Jim Doyle to visit with us to review this proposal and the overall Aerospace Science and Education Center plan. I am hopeful this meeting will take place soon.

While the plan has great educational and tourism related advantages, it could also prove beneficial for our local economy. The Federal Aviation Administration Associate Administrator for Commercial Space Transportation (FAA/AST) reported that U.S. economic activity linked to the commercial space industry totaled over \$95 billion and contributed to \$23.5 billion in employee earnings throughout the United States in 2002.

Again, while this proposal may sound somewhat futuristic, the Aerospace Science and Education Center could be coming to the Sheboygan lakefront, to Wisconsin and to the Midwest in the near future!

As always, it has been a pleasure communicating with you. Please remember to communicate with me and share your input by calling 888-295-8750, writing to me at P.O. Box 7882, Madison, WI 53707-7882, or by e-mailing me at Sen.L Leibham@legis.state.wi.us. You can also log on to the 9th Senate District on-line office at www.leibhamsenate.com.

It is an honor representing the residents of the 9th District in the State Senate!

November 18, 2005



Governor Jim Doyle

RE: The Great Lakes Aerospace Science and Education Center
at Spaceport Sheboygan

The Great Lakes Aerospace Science and Education Center at Spaceport Sheboygan will be a great asset not only to our county but to our state and the whole Upper Midwest.

In Sheboygan we have the only portal to space in the Midwest. Through our Rockets for Schools program we've attracted students from Wisconsin and other states to listen to astronauts, make rockets, and watch rockets launched in Sheboygan.

We would like your support to help develop a Great Lakes Aerospace Science and Education Center at Spaceport Sheboygan.

The Center will help promote math and science and other skills we manufacturers need to continue to do business in Wisconsin. It will help keep our educated population in Wisconsin.

Senate Bill (SB)352 has been submitted to the legislature to create the Wisconsin Aerospace Authority. The Wisconsin Aerospace Authority will develop a Spaceport in Sheboygan for the purpose of promoting and facilitating space exploration, space-related commerce, technology and math and science education. I urge that you support the legislation and the Great Lakes Aerospace Science and Education Center at Spaceport Sheboygan.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "RABemis". The signature is written in a cursive, flowing style.

Richard A. Bemis
President/Chief Executive Officer



September 27, 2005

The Honorable Jim Doyle
Governor of Wisconsin
State Capitol
P.O. Box 7863
Madison, WI 53707-7863

Re: The Great Lakes Aerospace Science and Education Center
At Spaceport Sheboygan

Dear Governor Doyle:

I would like to express my strong support for the Great Lakes Aerospace Science & Education Center at Spaceport Sheboygan. This project will provide a unique regional destination for aerospace discovery and education in the Midwest. At the Great Lakes Aerospace Science & Education Center at Spaceport Sheboygan visitors of all ages will have access to the wonders of space travel and exploration, and developing aerospace technology.

The Great Lakes Aerospace Science & Education Center at Spaceport Sheboygan will fill an unmet need in the Midwest as it will:

- Position Wisconsin as a space transportation center with the Midwest's only developing Spaceport;
- Capitalize on the Midwest's existing aerospace research and technology assets;
- Promote math, science, and engineering education in the Midwest; and
- Showcase new aerospace career opportunities and create a stronger central link between new graduates and aerospace companies throughout the region.

The convergence of educational institutions, private and nonprofit organizations, and specialists in the aerospace industry in Wisconsin; along with the proximity of the only Midwest Spaceport in Sheboygan, Wisconsin provides a rare opportunity to create this compelling regional destination. This exciting project has the ability to boost the Midwest's transportation, education, economic development, and national defense programs. Because of its importance and potential impact on the Midwest's economic and education systems I ask that you give this project your most thoughtful and serious consideration.

If I can be of further assistance to you in this matter please contact me via phone at 920-459-3317 or via email at mayor@ci.sheboygan.wi.us
Thank you for your consideration and attention.

Sincerely,

Juan Perez, J.D.
Mayor

OFFICE OF MAYOR

CITY HALL
828 CENTER AVE.
SHEBOYGAN, WI
53081-4495

920/459-3317
FAX 920/459-0256

The Sheboygan
Development
Corporation

August 9, 2005

Mayor Perez and
The Sheboygan Common Council

RE: Letter of Intent

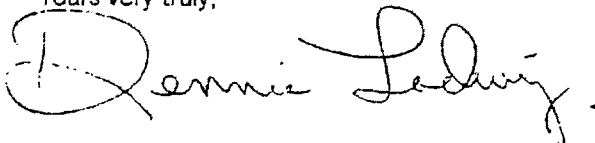
The Sheboygan Development Corporation (SDC) is pleased to submit the following Letter of Intent.

- 1) Spaceport Sheboygan. The City of Sheboygan has the Midwest's only commercial spaceport and launch site. The SDC would like to work with the City to develop a Spaceport Sheboygan Space and Science Center (the Center) as an educational, entertainment and tourist destination.
- 2) Operation of the Center. The Center would be owned and operated by a nonprofit entity governed by a Board of Directors with a mission statement and a strategy and business plan developed in cooperation with the City of Sheboygan. The Center would be a 501(c)(3) nonprofit organization designed to accept public and private funding.
- 3) Use of the Sheboygan Armory. The incorporation of the Sheboygan Armory into the project is essential. The Armory would be the principle structure in the Center complex. The site surrounding the Armory would be used for additional buildings, displays and parking.
- 4) Long-Term Lease of the Armory. As an integral part of the Space & Science Center plan, the City of Sheboygan would give the Armory and its two and one-half acre site to the Center through a long-term lease. The building would remain, be renovated and be used as part of the Center operations housing exhibits, displays, classrooms and other amenities. The Center would be responsible for the cost of maintenance on the building. In years in which the Center operated sufficient income, the organization would pay rent to the City.

It is SDC's intent to work out the details of a long-term lease for the Armory with the City once we have assurances that the project has received adequate funds in the form of the federal government and other sources.

If the terms set forth in this letter meet with your approval, please indicate your acceptance by signing both copies of this letter and returning one executed copy to the undersigned.

Yours very truly,



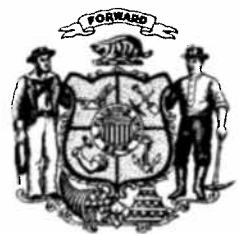
I approve the terms set for in this Letter of Intent.

Signed: 

Print Name: JUAN PEREZ



WISCONSIN STATE LEGISLATURE



Daniel C. Brandenstein, CAPT, USN, Ret.
P.O. Box 58980
Houston, TX 77258
281-853-3314

SB 352?
Date?

Kardemakel
+
Assoc.

To Whom It May Concern:

As a former astronaut who grew up in Wisconsin, I am certainly interested in the development of new capabilities that establish the ability to expand space research, develop commercial space activities and enhance motivational education opportunities. Additionally, as a current aerospace businessman, I am aware of the many entrepreneurial projects aimed at economical commercial access to space. Having reviewed the Wisconsin Aerospace Authority (WAA) bill, I enthusiastically support the creation of the WAA to conduct aerospace services that promote and facilitate space exploration and space-related commercial, technology and educational development.

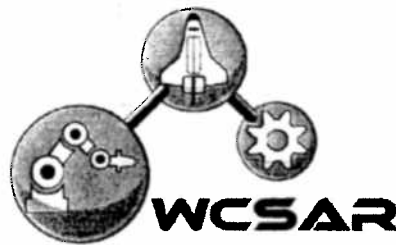
I believe that the WAA in conjunction with the Spaceport Sheboygan Space & Science Center will enable Wisconsin to capitalize on the emerging entrepreneurial space opportunities, develop new business opportunities, create numerous educational opportunities and add another tourist destination to the many currently available in Wisconsin.

Sincerely,



Dan Brandenstein





SB 352
?
Date?

Wisconsin Center for Space Automation and Robotics
College of Engineering • University of Wisconsin – Madison • U.S.A.

Why the Wisconsin Aerospace Authority is important for WI economy

Establishment of an aerospace facility (such as Spaceport Sheboygan) in Wisconsin will be important to the State's future in the following four areas:

1. Direct Economic Development

Spaceport Sheboygan will help stimulate the local, state, and nation economy by creating and/or expanding high-tech industry in rocket propulsion, precision manufacturing, robotics and automation, satellite communication, global information systems (GIS), weather systems technologies, launch operation, etc.

2. Indirect Economic Development

Spaceport Sheboygan will become a highly visible landmark of Wisconsin. It will attract considerable amount of tourists from the state of Wisconsin as well as from other states in the nation, which in turn, will stimulate many other entertainment businesses and support services in the state.

3. K-12 Education

Spaceport Sheboygan will bring the excitement of the space exploration into K-12 classrooms; will encourage students statewide to enthusiastically pursue math and physics which will raise K-12 math and physics standards in the state; and will actively involve the students and educators in science and engineering projects which will enhance students' expert thinking, problem solving, and comprehensive communication capabilities.

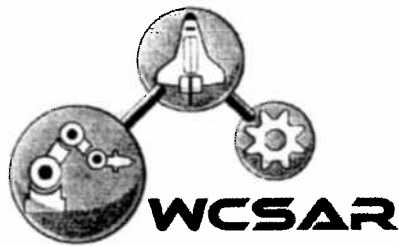
4. Defense

Spaceport Sheboygan will become the Midwest's center for aerospace industry, which will support regional and national goals for improving homeland security in the heartland. Affiliation with NASA and DoD can help facilitate that linkage.

Therefore, I would like to urge support for the Wisconsin Aerospace Authority - not only because it's important to Wisconsin's economy, but because Wisconsin may one day become the central hub for aerospace transportation in the U.S. and World.

Inexpensive transportation (easy access and inexpensive for people and payloads to get to space)

In the past, there were two channels to send payload or people into space: one was to go through Russian Space Agency and the other was through NASA. Since NASA announced to abandon the space shuttle program and to deemphasize the International Space Station (ISS) programs in mid 2004, the only channel left is to go through Russia. WAA would provide an alternative and competitive channel for



Wisconsin Center for Space Automation and Robotics
College of Engineering • University of Wisconsin – Madison • U.S.A.

sending payload and tourist into space due to:

- (a) Wisconsin has long history in developing space qualified payloads for NASA and the commercial companies. Flight payloads developed by the Wisconsin Center for Space Automation and Robotics, Orbital Technology, Inc., Quantum Device Inc., etc. have successfully flown more than ten times on the space shuttle, one time on Russian MIR station, and four times on the ISS. Wisconsin-developed flight hardware not only costs much less in the development and operation (in comparison to NASA-developed flight hardware), but also demonstrates great performance and high reliability through all the missions.
 - (b) Spaceport Sheboygan has an ideal orbital inclination for spacecraft to reach the International Space Station.
-



Wisconsin Space Grant Consortium (WSGC)

SB 3527

WSGC Background

- Established by US Congress in 1989 to help address the issues facing the Nation, including the need to ensure workers' preparation for a high-technology workforce and a decline in scholastic achievement, especially in science and mathematics. WSGC is one of 52 Space Grant Consortium, including one in every state plus Puerto Rico and the District of Columbia
- Represents NASA in Wisconsin
- Composed of 33 members including 9 UW-system universities, 9 private colleges/universities, 1 technical college, 7 industries, 5 non-profit organizations, and 2 Wisconsin State Departments
- Purpose – To coordinate and improve Wisconsin's future in aerospace science, design & technology
- Focus – To stimulate aerospace research, education, and outreach activities throughout the State
- Partial list of goals:
 1. Work with universities, educators, industry, and government to promote strong space- and aerospace-related science, mathematics, design, and engineering education in Wisconsin at all levels
 2. Stimulate, support, and coordinate interdisciplinary, interuniversity and university/industry research, training, and public service through a variety of research, educational, and outreach programs
 3. Recruit and provide support for the education and training of professionals, especially women, underrepresented minorities, and the developmentally challenged, for careers in space- and aerospace-related fields to meet the needs of the 21st century.

Higher Education Needs A Space Port in Wisconsin

You have heard or will hear testimony from industry about the benefits a Space Port in Wisconsin will have for them. We support our industry members in their cause, but want to focus on the higher education students that are now moving up through our programs and those students who will be following them in the future. These students are the next generation of employees for those high-technology industry jobs.

We have seen the direct impact a modest program like Rockets for Schools has on higher education choices. Last year a team from Milwaukee School of Engineers beat out all other teams in our sounding rocket competition. The MSOE team was led by a freshman engineering student with three years of Rockets for Schools under his belt.

We also see the possible far-reaching impact a Space Port in Wisconsin could bring. We have students who have launched high-altitude balloons and suborbital rockets. They are now ready to build satellites to send into orbit and beyond and we know they can do it, but we've gone as far as we can in the State at this point. To deploy those satellites into space, we currently are looking at out-of-state sources. Of course this type of hands-on

training can only enhance Wisconsin's chances of competing in a high-tech global market.

We are interested in providing our students with an in-State option that will allow them to progress in aerospace endeavors as far as their will and talents will take them.

Thank you for this opportunity to testify. If you have further questions, please contact Sharon Brandt, Program Manager, Wisconsin Space Grant Consortium, at brandts@uwgb.edu or (920) 465-2941.



It would be interesting to do a tour of the UW-Madison space automation & robotics.

SB 352 ?
Date ?



Speakers	Topic Area	Confirmed being there?	Part of a panel?
Van de Wall and Associates Brian Van de Wall or Jolena Presti	Economic Development	Yes	
Sheboygan Development Corporation Mike Muth, Gary Delmus, Dennis Ladwig, and Jim Testwuide	Economic Development	Yes	
Paper Transport Craig Dickman	Future of transportation and logistics to ISS	Checking on the date	
Ross Nova	Legal aspects of the legislation - Defense of why eminent domain is necessary	Yes	No – to speak alone
Sharon Brandt Wisconsin Space Grant Consortium	WSGC's goals and how the WAA meets those goals, excelling education opportunities within the state	Yes (Dr. Aileen Yingst will not be there.)	No – to speak alone
ORBITEC Ret. Astronaut Mark Lee	Economic Development/Industry Feasibility	Will know for sure next week. Traveling to Texas that afternoon and doesn't have his flight made yet.	
ORBITEC Eric Rice	Industry	Yes	
Rocketplane and Space Explorers George French	Future market & Why Wisconsin	Yes	No – to speak alone
WCSAR Dr. Weijia Zhou	- Why the Wisconsin Aerospace Authority is important for WI economy - Inexpensive transportation (easy access and inexpensive for people and payloads to get to space) - NASA Center of Excellence (if time permits)	Yes	
Sheboygan Chamber of Commerce Dee Olson	Economic Development & Community's buy in	Yes	
FAA AST Representative	Feasibility	No – they have determined that it would not be appropriate. However, Doug Graham is working on a letter of endorsement (needs to get approved)	
Chrissy Paape	Purpose and Goals	Yes	No – to speak alone
Rockets for Schools co-director Randy Lutz		Yes	
Margaret Farrow		Yes	

SB 352 ?



Space Entrepreneurs & the Wisconsin Aerospace Authority

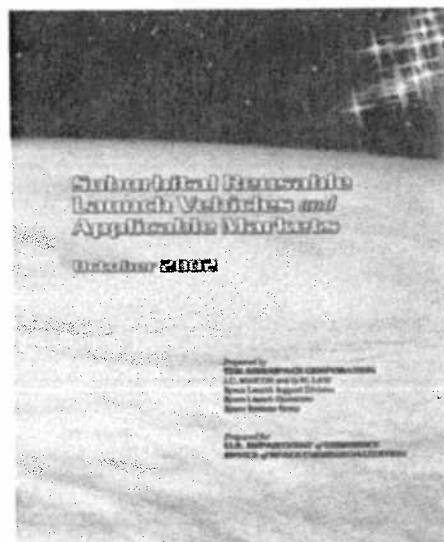


By George French
President/CEO of Rocketplane Limited, Inc.

SB 352?

COMMERCIAL SPACE EMERGENCE

- World and Domestic Investment
- Advanced Technology
- Federal Legislation
- Government Needs
- Private Sector Investment



Why Wisconsin?

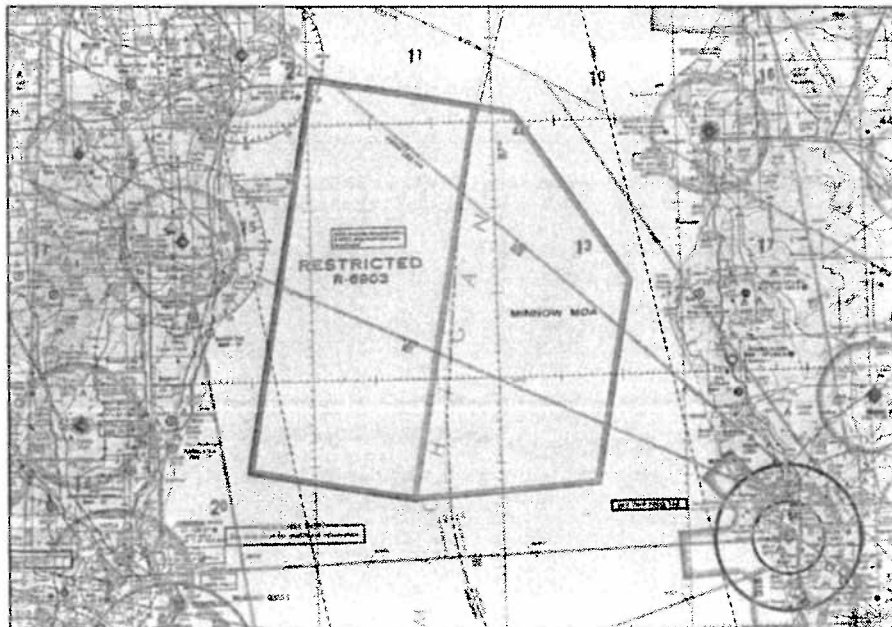
- East Coast on Lake Michigan
- Restricted Flyover Zone
 - Federal Aviation Administration (FAA)
 - Military Operations Area (MOA)



- Existing regional consortium
- Favorable Water Depth Conditions
- Ideal Orbital Inclination to Reach the ISS
- Wisconsin Department of Transportation Site Approval

3

Restricted MOA & FAA Flyover Zone



4

NASA's Status

- NASA has left suborbital space.
- NASA needs the commercial aerospace industry to help keep ISS operational
- NASA now needs commercial competition to help drive costs down.
- NASA now needs private sector support
- Support of KSC for Spaceport Sheboygan



5

Space Commerce Potential




● **Sub-Orbital Market**

- Suborbital Tourism
- Space Ports
- Payload Microgravity
- Space Qualification






● **Reusable Satellite Launch System**

Communications Satellites
Reusable satellite launch system







● **Earth Orbit and ISS**

- Tourism
- Permanent Human
- Science platform





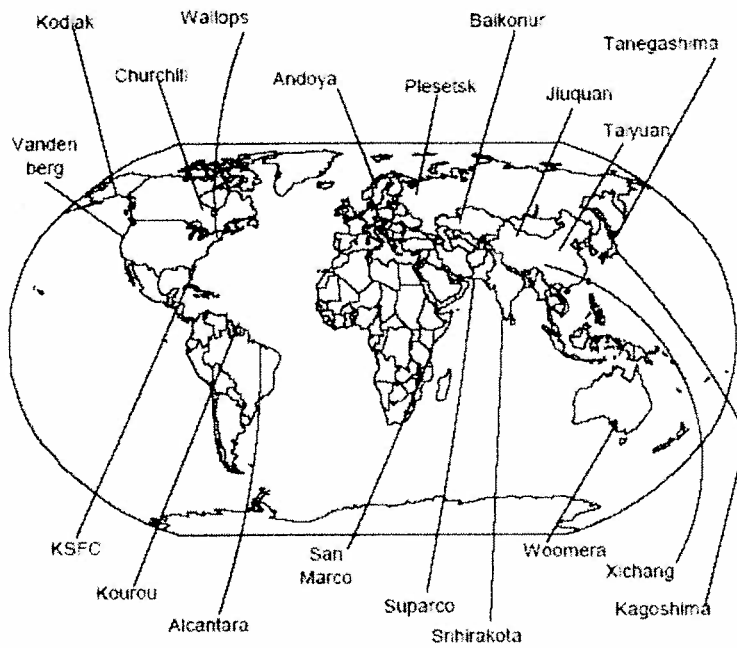
● **Lunar Surface Tourism & Power**

- Habitats/Settlements
- ³He Mining
- Solar Power



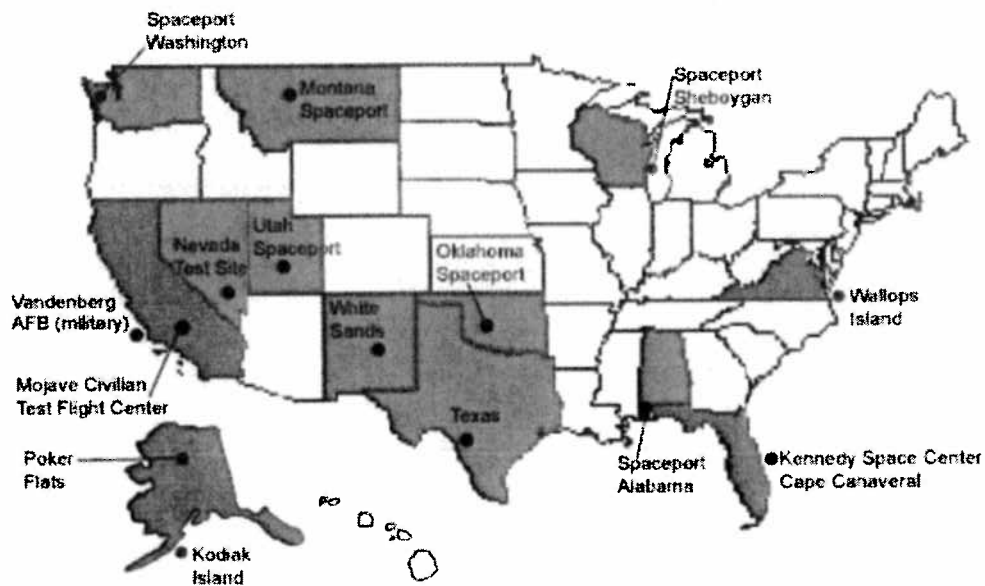

6

Spaceports Around the World



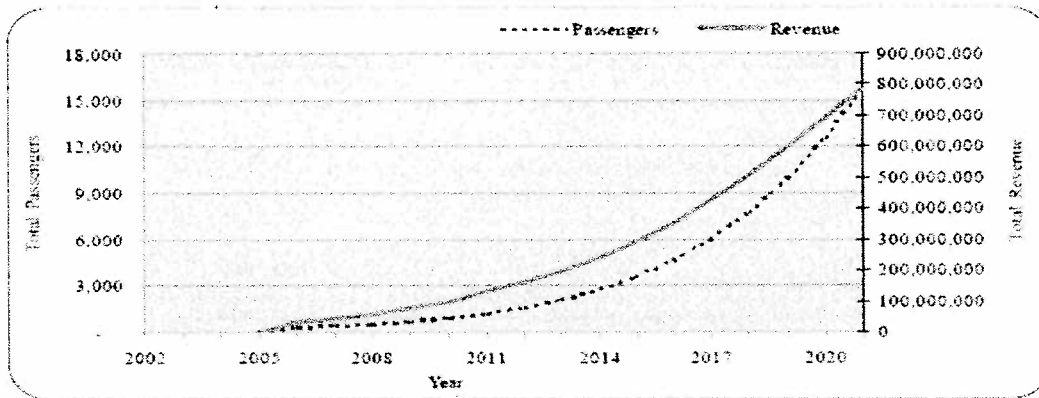
7

United States Spaceports



8

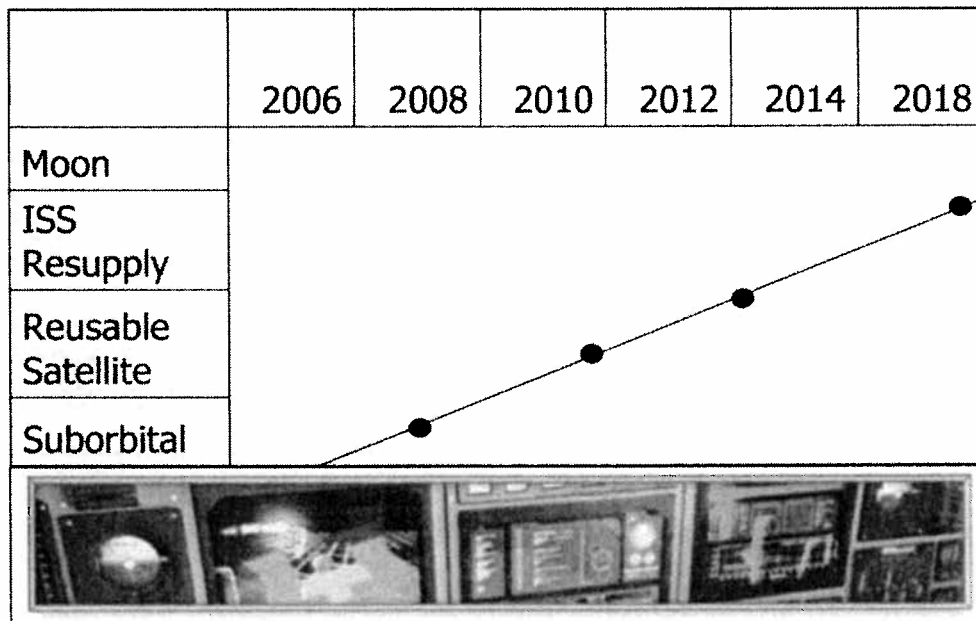
Suborbital Revenue Forecast



Futron's forecast for suborbital space travel projects indicates that by 2021, more than 15,000 passengers could be flying annually, representing revenues in excess of US\$700 million.

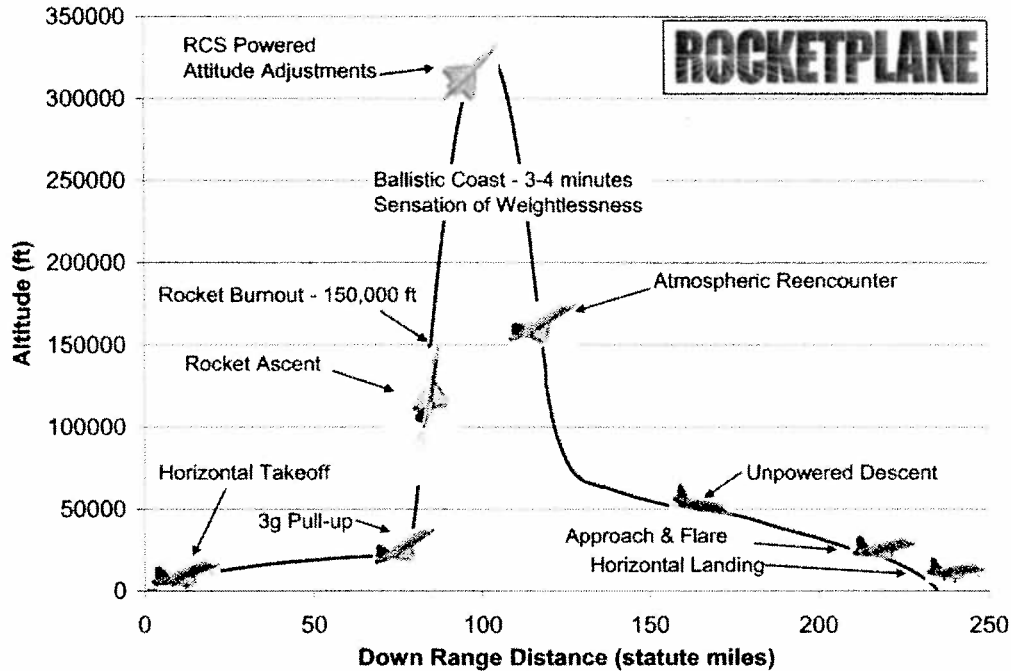
9

When will this happen?



10

Suborbital Flight Trajectory

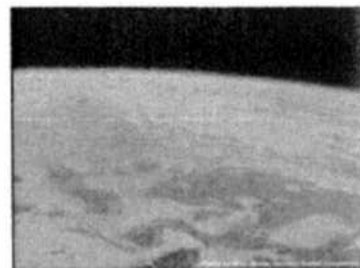


11

Space Entrepreneurs

The Dawn of New Space:

- **Dennis Tito** paid \$20 million and traveled to Russia to fly to the International Space Station.
- **Paul Allen**, one of the richest men in America, funded X-Prize winner Burt Rutan and Scaled Composites for \$30 million.
- **Elon Musk**, Internet mogul and Pay Pal creator, has committed \$200 million for a new partially reusable launch vehicle that will significantly reduce cost to orbit for payloads.
- **Jeff Bezos**, president of Amazon.com, is developing a launch port and spacecraft in Texas.
- **Robert Bigelow** will soon launch his first sub-scale test module from Russia, having committed \$500 million to the project.
- **Sir Richard Branson**, owner of Virgin Airlines and the Virgin conglomerate, is contracting Rutan to build five sub-orbital vehicles for \$125-150 million.
- **John Carmack**, creator of the *Doom* game and movie, has contributed \$50 million to Armadillo Aerospace.
- Collectively, these investments total more than \$1 billion.



12

ROCKETPLANE

Board of Directors:

- **General Merrill A. "Tony" McPeak** (ret) - Chairman; retired Chief of Staff of the United States Air Force.
- **Dr. James R. Stuart** – Secretary; former senior executive at multiple aerospace companies, including Orbital Sciences.
- **Dr. William Byrd** – President of the National Space Grant Foundation; Professor of Aerospace Engineering at Iowa State University; former NASA employee with experience on both the Space Shuttle and the International Space Station.
- **Dr. Eric Rice** – President of Orbital Technologies Corp; Ph.D. in Aeronautical and Astronautical Engineering, Ohio State University; B.S. in Chemistry and Physics, University of Wisconsin.
- **George D. French** – President; successful business owner and space technology investor.
- **Craig Dickman** – Ph.D. candidate and President of a trucking and logistics company.
*Nominated

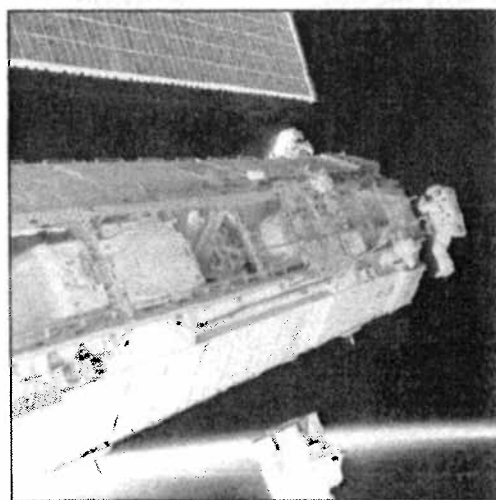


13

ROCKETPLANE

Management Team:

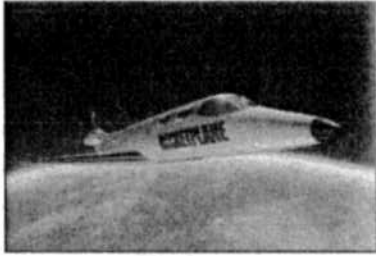
- **David Urie** – Executive Vice President and Program Manager; former Director of Space and High Speed Systems at Lockheed Martin's "Skunk Works"; Distinguished Lecturer for the American Institute of Astronautics and Aeronautics and serves on their National Advisory Board.
- **John B. Herrington** - Vice President and Director of Flight Operations; U.S. Navy Commander; NASA astronaut and Mission Specialist for the STS 113 - Endeavor.
- **Robert I. Seto** – Vice President Engineering Systems & Analysis; former Program Director for Development Aircraft at Bombardier Aerospace and Learjet.



Astronauts Michael E. Lopez-Alegria and John B. Herrington work on the newly installed Port One truss on the International Space Station (ISS) during the STS-113 mission. The spacewalk lasted 6 hours, 10 minutes. The end effector of the Canadarm2 / Space Station Remote Manipulator System and Earth's horizon are visible in bottom of frame.

14

Spaceport Sheboygan: Market Potential



- Suborbital Space Travel
- Orbital Space Travel
- NASA Partnerships
- Military Applications
- Lunar Transfer
- Civilian Space Tourism
- International Markets
- Microgravity Science Experiments and Payloads
- Human Transportation System
- Research and Development Opportunities
- Satellite (Earth Observation, Environmental Monitoring, Catastrophe Management System, Remote Sensing, Logistics, Crop Management)
- Space Qualification
- International Space Station

15





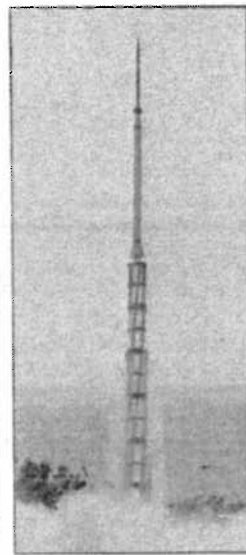
Wisconsin Aerospace Authority



SB 352?

Wisconsin Aerospace Authority

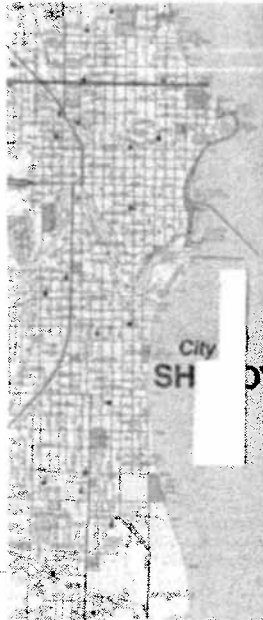
The Wisconsin Spaceport has been the home to the Rockets for Schools event since 1995. Super Loki rockets have reached 34 miles in altitude from Spaceport Sheboygan.



Wisconsin Aerospace Authority

Proposed Regional Spaceport

Officials from Kennedy Space Center in Florida have visited the site and recognized the feasibility of Spaceport Sheboygan as a regional spaceport.



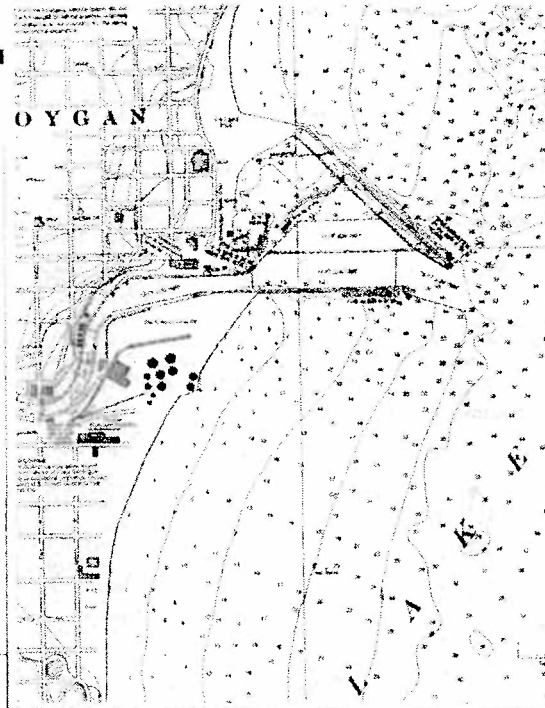
Wisconsin Aerospace Authority

What Makes Spaceport Sheboygan Unique?

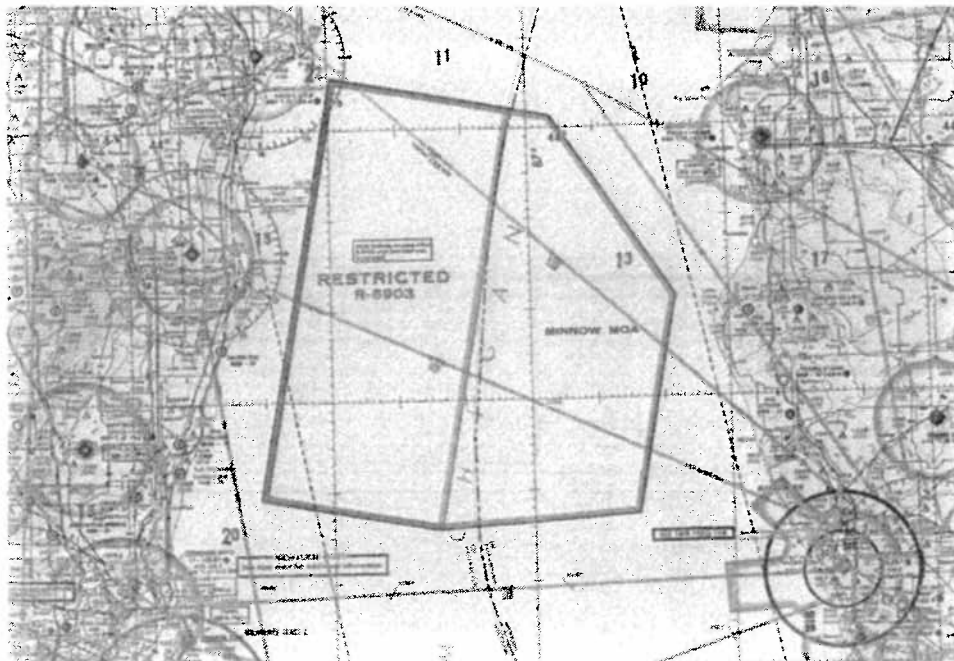
- Has an East Coast – Lake Michigan (uninhabited)
 - Favorable Water Depth Conditions
 - Restricted Flyover Zone
 - Federal Aviation Administration (FAA)
 - Military Operations Area (MOA)
 - Better Orbital Inclination to Reach the ISS
 - Wisconsin Spaceport is positioned as a Regional Spaceport within the Upper Midwest
 - Wisconsin Department of Transportation Site Approval
-

Wisconsin Aerospace Authority

Spaceport
Sheboygan
Features
Favorable
Water Depth
Conditions

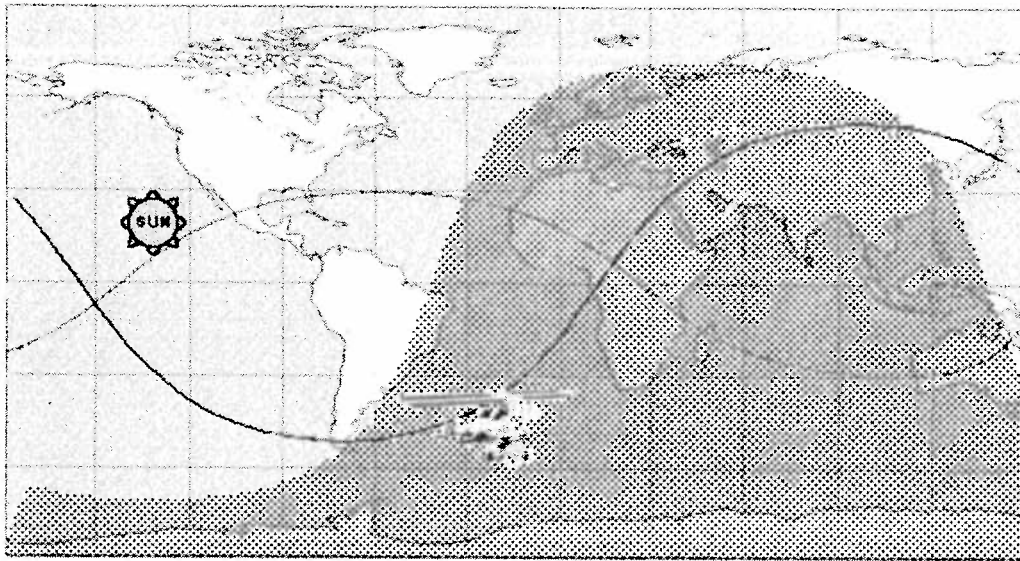


The air space is easily closed by the Federal Aviation Administration (FAA) and is a designated Military Operations Area (MOA).



Wisconsin Aerospace Authority

Spaceport Sheboygan has a better Orbital Inclination than Florida.



Wisconsin Aerospace Authority

WISCONSIN DEPARTMENT OF TRANSPORTATION
4902 Sheboygan Avenue
Madison, Wisconsin 53702

CERTIFICATE OF AIRPORT SITE APPROVAL

Spaceport
Sheboygan has
been granted site
approval from the
Wisconsin
Department of
Transportation.

The Wisconsin Department of Transportation, pursuant to Section 114.134, Wisconsin Statutes, hereby issues a Certificate of Site Approval to the City of Sheboygan for the location of a spaceport, known as Space Port, Sheboygan, in Section 23, T 15 N, R 23 E, City of Sheboygan, Sheboygan County, as described in Application for Airport Site Approval dated August 29, 2000.

This Certificate is issued subject to the following conditions:

- (1) The above site is approved for a public-use spaceport only.
- (2) This Certificate shall expire eighteen months from the date issued below if the spaceport has not been completed. The applicant may request additional time to complete the spaceport and the Department of Transportation may issue an extension or require the applicant to submit a new Application for subsequent determination.
- (3) This Certificate is issued and based upon the determination by the Department of Transportation that the above location for the proposed spaceport is compatible with existing and planned transportation facilities in the area. This determination in no way preempts or waives any ordinances, laws, or regulations of any other governmental body or agency.
- (4) In the event the above location is no longer used as a spaceport, the owner shall notify the Department of Transportation immediately, and the Certificate will expire three months after such notice is received.

APPROVED:

Terrence D. Matcaby, P.E.
Secretary
Department of Transportation
by:

10/15/00
Date

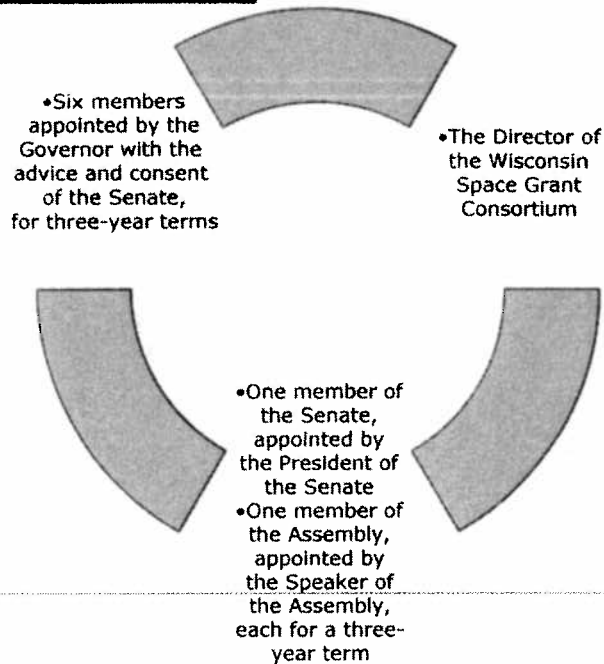
Thomas J. Thomas
Thomas J. Thomas, Chief
Aviation Management & Education
Section, Bureau of Aeronautics

(SEAL)

Wisconsin Aerospace Authority

Legislation Authorization

The legislation authorizes the creation of the Wisconsin Aerospace Authority, which will be made up of the following Board of Directors:



Wisconsin Aerospace Authority

Purpose of the WAA

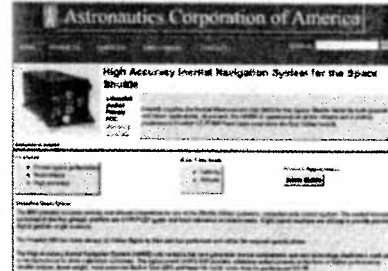
- To plan and execute the development of Spaceport Sheboygan.
 - To conduct safety and environmental studies to ensure the spaceport meets federal and state requirements.
 - To design, develop, and operate spaceports, aerospace facilities, and spacecraft. Provide aerospace services, including laboratories and research facilities.
 - To conduct aerospace services that promote, advance, and facilitate space exploration and space-related commercial, technological, and educational development in Wisconsin.
-

Wisconsin Aerospace Authority

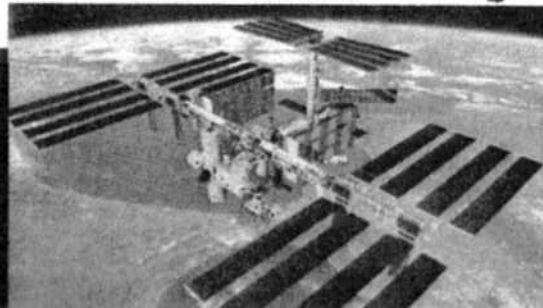
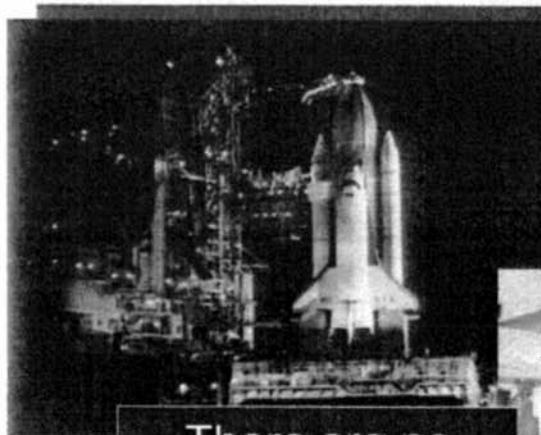
Space Affiliations in Wisconsin



SPACE EXPLORERS™
Bringing Space Into The Classroom



Wisconsin Aerospace Authority



There are no limits to what humans can explore in space.