

# 05hr\_SC-JCEDCA\_sb0352\_pt01



(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**

## Senate

### Record of Committee Proceedings

#### **Committee on Job Creation, Economic Development and Consumer Affairs**

##### **Senate Bill 352**

Relating to: creating the Wisconsin Aerospace Authority to develop and operate spaceports and related facilities and services and other aerospace facilities and services and providing the authority with the power of condemnation, authorizing municipalities to develop and operate spaceports, and making an appropriation.

By Senators Leibham, Schultz, Brown and Hansen; cosponsored by Representatives Kestell, Suder, Davis, Jensen, Albers, LeMahieu, Ott, Van Roy, Gronemus, Nelson, Van Akkeren and Vruwink.

September 28, 2005 Referred to Committee on Job Creation, Economic Development and Consumer Affairs.

November 28, 2005 **PUBLIC HEARING HELD**

Present: (5) Senators Kanavas, Zien, Reynolds, Lassa and Decker.  
Absent: (0) None.

##### Appearances For

- Joe Leibham, Sheboygan — 9th Senate District
- Steve Kestell, Madison — 27th Assembly District
- Margaret Farrow, Pewaukee — Self
- George French, Jr., Green Bay — Space Explorers, Inc
- Christina Paape, Green Bay — Space Explorers, Inc
- Dennis Ladwig, Sheboygan — Sheboygan Development Corporation
- James Testwaide, Sheboygan — Sheboygan Development Corporation--Rockets for Schools
- Dee Olsen, Oostburg — Sheboygan Chamber of Commerce/Sheboygan Development Corporation
- Jolena Presti, Madison — Vandewalle and Associates
- Eric Rice, Middelton — Orbitec/WSI
- Sharon Brandt, Green Bay — Wisconsin Space Grant Consortium
- Weijia Zhou, Madison — University of Wisconsin Madison
- Ross Nova, Green Bay — Wisconsin Aerospace Authority Coalition

##### Appearances Against

- Erin Longmire, Madison — Wisconsin Airport Management Association

##### Appearances for Information Only

- David Greene, Madison — Wisconsin Department of Transportation

Registrations For

- Randall Lutz, Sheboygan — Rockets for School
- William Farrow, Milwaukee — Self-Assitant Professor of Mechanical Engineering--Member of the Wisconsin Space Consortium
- Carol Lutz, Sheboygan — Rockets for School
- Terry Van Akkeren, Madison — 26thh Assembly District
- Dan Le Mahieu, Madison — Wisconsin State Assembly

Registrations Against

- None.

November 29, 2005 **EXECUTIVE SESSION HELD**

Present: (5) Senators Kanavas, Zien, Reynolds, Lassa and Decker.  
Absent: (0) None.

Moved by Senator Kanavas that **Senate Amendment 1** be recommended for introduction and adoption.

Ayes: (5) Senators Kanavas, Zien, Reynolds, Lassa and Decker.  
Noes: (0) None.

INTRODUCTION AND ADOPTION OF SENATE AMENDMENT 1  
RECOMMENDED, Ayes 5, Noes 0

Moved by Senator Kanavas that **Senate Amendment 2** be recommended for introduction and adoption.

Ayes: (5) Senators Kanavas, Zien, Reynolds, Lassa and Decker.  
Noes: (0) None.

INTRODUCTION AND ADOPTION OF SENATE AMENDMENT 2  
RECOMMENDED, Ayes 5, Noes 0

Moved by Senator Kanavas that **Senate Amendment 3** be recommended for introduction and adoption.

Ayes: (5) Senators Kanavas, Zien, Reynolds, Lassa and Decker.  
Noes: (0) None.

INTRODUCTION AND ADOPTION OF SENATE AMENDMENT 3  
RECOMMENDED, Ayes 5, Noes 0

Moved by Senator Kanavas that **Senate Bill 352** be recommended for passage as amended.

Ayes: (3) Senators Kanavas, Zien and Lassa.

Noes: (2) Senators Reynolds and Decker.

PASSAGE AS AMENDED RECOMMENDED, Ayes 3, Noes 2

Mike Richards  
Committee Clerk

**SENATE BILL 352 (LRB -2987)**

An Act to renumber and amend 114.136 (2) (b); to amend 7.33 (1) (c), 13.172 (1), 13.62 (2), 13.94 (1) (b), 13.94 (1) (g), 13.94 (4) (a) 1., 16.002 (2), 16.004 (4), 16.004 (5), 16.004 (12) (a), 16.01 (1), 16.045 (1) (a), 16.41 (4), 16.417 (1) (b), 16.52 (7), 16.528 (1) (a), 16.53 (2), 16.54 (9) (a) 1., 16.611 (2) (a) and (c), 16.70 (2), 16.75 (1m), 16.765 (1), (2), (4), (5), (6), (7) (intro.) and (d) and (8), 16.838 (1) (b), 16.85 (2), 16.865 (8), 19.42 (5), 20.395 (2) (dq), 20.395 (2) (dv), 20.395 (2) (dx), 23.175 (1) (b), 25.50 (1) (d), 32.01 (1), 32.05 (intro.), 71.26 (1) (be), 77.54 (9a) (a), 84.072 (3), 85.02 (1), 100.45 (1) (dm), 101.177 (1) (d), chapter 114 (title), 114.002 (1), 114.002 (3), 114.04, 114.05, 114.07, 114.105, 114.11 (title), 114.11 (1), (2), (3), (4) and (5) (intro.), 114.12, 114.13, 114.134 (title), 114.134 (1), (2), (3) and (4) (c), 114.135 (intro.), (1), (2), (3), (4), (6), (7) and (8), 114.136 (title), 114.136 (1) (a), (b) and (c), (2) (a), (3), (4) and (5), 114.151, 114.31 (1) and (4), 114.33 (12), 114.37 (title), 230.03 (3), 281.75 (4) (b) 3., 285.59 (1) (b), 560.032 (1), 893.80 (1), 893.80 (1g), 893.80 (3), 893.80 (4), 893.80 (5) and 893.80 (7); and to create 24.61 (2) (a) 10., 25.17 (3) (b) 13., 32.02 (11m), 40.02 (54) (j), 66.0603 (1m) (a) 3u., 70.11 (38m), 71.05 (1) (c) 7., 71.26 (1m) (h), 71.45 (1t) (h), subchapter I (title) of chapter 114 [precedes 114.001], 114.002 (11m), 114.002 (18r), (18s) and (18t), 114.375, subchapter II of chapter 114 [precedes 114.60] and 219.09 (1) (g) of the statutes; relating to: creating the Wisconsin Aerospace Authority to develop and operate spaceports and related facilities and services and other aerospace facilities and services and providing the authority with the power of condemnation, authorizing municipalities to develop and operate spaceports, and making an appropriation.

**2005**

09-28.	S.	Introduced by Senators <b>Leibham, Schultz, Brown and Hansen</b> ; cosponsored by Representatives <b>Kestell, Suder, Davis, Jensen, Albers, LeMahieu, Ott, Van Roy, Gronemus, Nelson, Van Akkeren and Vruwink</b> .	
09-28.	S.	Read first time and referred to committee on Job Creation, Economic Development and Consumer Affairs .....	373
09-28.	S.	Report of joint survey committee on Retirement Systems requested .....	373
10-19.	S.	Fiscal estimate received.	
10-21.	S.	Fiscal estimate received.	
11-28.	S.	Public hearing held.	
11-29.	S.	Executive action taken.	
11-29.	S.	Report introduction and adoption of Senate Amendment 1 recommended by committee on Job Creation, Economic Development and Consumer Affairs, Ayes 5, Noes 0 ( <b>LRB a1514</b> ) .....	466
11-29.	S.	Report introduction and adoption of Senate Amendment 2 recommended by committee on Job Creation, Economic Development and Consumer Affairs, Ayes 5, Noes 0 ( <b>LRB a1519</b> ) .....	466
11-29.	S.	Report introduction and adoption of Senate Amendment 3 recommended by committee on Job Creation, Economic Development and Consumer Affairs, Ayes 5, Noes 0 ( <b>LRB a1571</b> ) .....	466
11-29.	S.	Report passage as amended recommended by committee on Job Creation, Economic Development and Consumer Affairs, Ayes 3, Noes 2 .....	466
11-29.	S.	Available for scheduling.	
11-29.	S.	Withdrawn from committee on Senate Organization and rereferred to joint committee on Finance, pursuant to Senate Rule 46 (2)(c) .....	467
11-30.	S.	Executive action taken.	
12-07.	S.	Report adoption of Senate Amendment 1 recommended by joint committee on Finance, Ayes 15, Noes 0 ..	494
12-07.	S.	Report adoption of Senate Amendment 3 recommended by joint committee on Finance, Ayes 15, Noes 0 ..	494
12-07.	S.	Report introduction and adoption of Senate Amendment 4 recommended by joint committee on Finance, Ayes 15, Noes 0 ( <b>LRB a1588</b> ) .....	494
12-07.	S.	Report introduction and adoption of Senate Amendment 5 recommended by joint committee on Finance, Ayes 14, Noes 1 ( <b>LRB a1601</b> ) .....	494
12-07.	S.	Report introduction and adoption of Senate Amendment 6 recommended by joint committee on Finance, Ayes 15, Noes 0 ( <b>LRB a1617</b> ) .....	494
12-07.	S.	Report introduction and adoption of Senate Amendment 7 recommended by joint committee on Finance, Ayes 15, Noes 0 ( <b>LRB a1623</b> ) .....	494
12-07.	S.	Report introduction and adoption of Senate Substitute Amendment 1 recommended by joint committee on Finance, Ayes 13, Noes 2 ( <b>LRB s0342</b> ) .....	494
12-07.	S.	Report passage as amended recommended by joint committee on Finance, Ayes 13, Noes 2 .....	494
12-07.	S.	Available for scheduling.	

**2006**

03-01.	S.	Request for report of joint survey committee on Retirement Systems rescinded .....	652
03-01.	S.	Placed on calendar 3-2-2006 by committee on Senate Organization.	
03-02.	S.	Read a second time .....	656
03-02.	S.	Placed at the foot of the eleventh order of business on the calendar of 3-2-2006 .....	656
03-02.	S.	Senate amendment 1 to Senate substitute amendment 1 offered by Senators Hansen and Robson ( <b>LRB a2620</b> ) .....	669
03-02.	S.	Senate amendment 1 to Senate substitute amendment 1 <b>adopted</b> .....	669

03-02.	S.	Senate substitute amendment 1 <b>adopted</b> .....	669
03-02.	S.	Ordered to a third reading .....	669
03-02.	S.	Rules suspended .....	669
03-02.	S.	Read a third time and <b>passed</b> , Ayes 26, Noes 6 .....	669
03-02.	S.	Ordered immediately messaged .....	670
03-07.	A.	Received from Senate .....	910
03-07.	A.	Read first time and referred to committee on Rules .....	911
03-07.	A.	Placed on calendar 3-9-2006 by committee on Rules.	
03-07.	A.	Made a special order of business at 10:34 A.M. on 3-9-2006 pursuant to Assembly Resolution 51 .....	933
03-09.	A.	Read a second time .....	946
03-09.	A.	Ordered to a third reading .....	946
03-09.	A.	Rules suspended .....	946
03-09.	A.	Read a third time and <b>concurred in</b> .....	946
03-09.	A.	Ordered immediately messaged .....	946
03-10.	S.	Received from Assembly concurred in .....	743
03-17.	S.	Report correctly enrolled on 3-17-2006 .....	748
04-13.	S.	Presented to the Governor on 4-13-2006 .....	772
04-17.	S.	Report <b>approved</b> by the Governor on 4-14-2006. 2005 Wisconsin Act 335 .....	775
04-19.	S.	Published 4-28-2006 .....	777





# Joe Leibham

State Senator  
9th State Senate District

## MEMO

**TO:** George French                      Dennis Ladwig  
          Ross Nova                         Chrissy Paape

**CC:** Senator Leibham

**FROM:** Eric Schutt

**DATE:** November 17, 2005

**RE:** Background on Madison Events Surrounding Senate Bill 352

To prepare for the events in Madison on November 28, 2005, surrounding the Wisconsin Aerospace Authority (WAA) legislation, I wanted to provide you with this background memo.

To help provide some structure to this document, I have provided the following topic areas for discussion:

- Timeline for November 28, 2005
- Details for Pre-meeting
- Details for meeting with Governor's office
- Details for Senate Hearing
- To-do list
- Contact Info

### Timeline for November 28, 2005

Below, please find a timeline for the day. In the subsequent sections, I will go into more detail regarding each specific event.

- 10:30 a.m.    Meet in State Senator Joe Leibham's Office
- 11:00 a.m.    Meeting with Representatives from the Governor's office
- 1:00 p.m.    Senate Committee on Job Creation, Economic Development and  
                  Consumer Affairs Committee  
                  Location of Hearing : TBD



## Details for Pre-Meeting

To provide an opportunity for any last minute questions, I am recommending that all individuals who will attend the meeting with the representatives from the Governor's office plan on arriving by 10:30 a.m. to pre-meet in Senator Leibham's office. Our office is located in 127 South, State Capitol.

## Meeting With Governor's Office

The meeting will occur in the Governor's Conference Room on the 1<sup>st</sup> Floor of the East Wing from 11 a.m. until approximately 11:30 a.m. This meeting has been confirmed with Patrick Guarasci from the Governor's office.

Expected Participants will include the following:

### Legislators

Senator Leibham (Senate Legislative Lead)  
Senator Grothman (Senate co-sponsor)  
Representative Kestell (Assembly Legislative Lead)  
Representative LeMahieu (Assembly co-sponsor)  
Representative Van Akkeren (Assembly co-sponsor)

### Rocketplane and Space Explorers

George French  
Ross Nova  
Chrissy Paape

### Sheboygan Development Corporation (SDC)

Dennis Ladwig  
Mike Muth  
Jim Testwuide

### Staff

Eric Schutt  
Others - TBD

### Governor's Office Representatives

The Governor was previously scheduled to be out of the Madison area on 11/28. As a result, senior members of his staff and representatives from the Department of Administration will participant in the meeting on his behalf.

### Goal of Meeting

This meeting will provide an excellent opportunity to provide the Governor's office with an overview of this project. Participants should stress the critical importance and need for this legislation, based on the economic and educational importance of this project to the Lakeshore Region and the State of Wisconsin.

While our time will be limited for this meeting, it is important for each group to have an equal opportunity to present their story as it relates to the overall need for this project.

To best organize our time, I would suggest we start by explaining what we are trying to accomplish with the legislation by describing local efforts led by Dennis Ladwig and others from the SDC and leading into what we are attempting to accomplish for the state with regards to future markets being led by George French.

In each of these descriptions, I would suggest providing a brief overview of your meetings with representatives from the federal government and others. Including, providing the Governor's representatives with the materials that you have provided to members of our federal delegation and state legislators during your previous meetings on this topic.

Following this overview, I would suggest we then talk specifically about the legislation. This would be led by the legislators who have drafted, and support this initiative, including Ross Nova, Chrissy Paape and others.

My understanding from the Governor's staff is that the Governor is open to this legislation and that they are looking forward to our meeting to hear more about this proposal.

Please let me know your thoughts regarding this suggested approach, and let me know if I have missed any expected participants for this meeting. I would like to provide the Governor's office and the legislators involved with a list of attendees **by next week Tuesday, November 22.**

### **Hearing on Senate Bill 352**

The WAA legislation will receive a hearing before the Senate Committee on Job Creation, Economic Development and Consumer Affairs. While this hearing has not yet been finalized, I expect that to occur on Monday, November 21.

I have spoken directly with Senator Kanavas' staff and they have assured me that they fully expect this hearing to occur on Monday, November 28, at 1:00 p.m. with the public notice to go out early next week.

### **Members of the Committee**

State Senator Ted Kanavas (R-Brookfield), Chair  
State Senator Tom Reynolds (R-West Allis)  
State Senator Dave Zien (R-Eau Claire)  
State Senator Russ Decker (D-Schofield)  
State Senator Julie Lassa (D-Stevens Point)

To date, I have discussed this proposal with each committee member's staff. So far, I have only heard concerns from Senator Reynold's staff regarding the issue of eminent domain included in the legislation and the language relating to the composition of an 80/20 split between federal and state funds under the Department of Transportation for the building expenditures.

While the legislation does not have an appropriation, we can anticipate questions regarding this aspect. Put simply, "What will this cost the state?" We have stressed to

legislators and staff that we anticipate this project to be funded by private and federal support, but this will inevitably be a question that will need to be answered.

In addition, we have heard from Senator Carol Roessler regarding her desire to include two amendments that would remove the legislative audit bureau and state ethics filing exemptions. I have already been working with George, Ross and Chrissy on this issue.

Goals for Hearing

The goals for the hearing are very similar to our goals for the Governor’s meeting. Chrissy has already provided me with the following draft of suggested speakers, topic areas and their ability to participate that should help to ensure that all areas are covered:

Speakers	Topic Area	Confirmed being there
Van de Wall and Associates Brian Van de Wall or Jolena	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 eminent domain & code of ethics	Yes
Aileen Yingst Wisconsin Space Grant Consortium	Education	Not sure – Checking if Sharon Brandt could speak is she is unable
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	Yes
WCSAR Dr. Weijia Zhou	Education	Left message requesting
Sheboygan Chamber of Commerce Dee Olson	Economic Development	Not sure – is waiting to hear if we are 100% sure on the date. Needs to rearrange schedule if so.
FAA AST Representative	Feasibility	Checking w/ boss
Chrissy Paape		Yes

In addition to these proposed witnesses, the committee will hear from legislators in support or opposition to this legislation and any other members of the public who wish to testify. At this point, I do not anticipate any legislators to testify in opposition, but that may change. Traditionally, legislators are asked to speak first as the authors/sponsors of the legislation.

Testimony should be **brief**. As long as the point has been covered, it is better to provide less than more in your oral testimony. Committee hearings typically last approximately 2

hours and witnesses' testimony should be kept to **2 to 3 minutes** and should be different from the comments provided by previous and future witnesses. If testimony goes over this limit, it is not unusual for the Committee Chair to ask witnesses to summarize their comments.

Each witness should plan on providing copies for all committee members of their testimony. This means, each witness should bring along 10 copies of their testimony and 10 copies of any other documents that they plan on providing to committee members. This should include letters of endorsement for the project, background materials, and business plans - anything that you feel will further help to advance this proposal.

I am more than happy to review draft copies of testimony and provide suggestions. To allow me enough time, I would appreciate anything you can do to get me a copy of the testimony by Tuesday morning, at the latest. This will allow me time to review these and provide feedback.

### **To-Do List**

To prepare for November 28, 2005, I have comprised the following to-do list by person responsible for completing each task.

<u>Task</u>	<u>Assigned To</u>
Final Confirmation of Hearing	Eric
Agree to approach for Governor's meeting	All
Confirm attendees for meeting with Governor's Representatives	Chrissy/Dennis
Confirm Governor's Representatives expected to attend	Eric
Prepare Testimony	Each Individual
Submit Draft Testimony to Eric by 11/22 - if desired	Each Individual
Review Testimony and Return Comments by 11/23 a.m.	Eric
Send FAQ sheet to Committee Members by 11/22	Chrissy/Eric
Provide All Participating Legislators With Background Doc by 11/22	Eric
Finalize Proposed Amendments to Legislation by 11/21	Chrissy/Eric/George
Make Copies of all Materials to Be Distributed	Each Individual

Please send me any other items that I may have forgotten.

### **Contact Info**

As you all know, I am out of the office starting tomorrow through next week. However, I will be accessible via cell phone at (608) 239-9656, via office e-mail at [Eric.Schutt@legis.state.wi.us](mailto:Eric.Schutt@legis.state.wi.us), or via my personal e-mail at [EricSchutt@aol.com](mailto:EricSchutt@aol.com).

I am also more than willing to participate on a conference call at any point to work these issues out, please let me know. Thank you all for your work on this effort.

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	





MARK C. LEE  
Program Manager

SB 352  
?

23 November 2005

To Whom It May Concern

RE: Wisconsin Aerospace Authority

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.

Spaceport Sheboygan will be a destination that draws people from around the world. The Wisconsin Aerospace Authority will oversee the development of Spaceport Sheboygan. It will conduct the safety and environmental research studies as well as work with various organizations within the state to promote aerospace within the state. It will fulfill functions similar to what other states currently have in place. 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 the Wisconsin Aerospace Authority and hope you will do the same. If I can be of further reference, please contact me at 608-229-2814. Thanks for your attention and let's work together to make this dream a reality.

Sincerely,

Mark C. Lee

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





November 23, 2005

State Senator Ted Kanavas  
P.O. Box 7882  
State Capitol  
Madison, WI 53707

Dear Senator Kanavas,

I would like to take this opportunity to thank you for holding the senate hearing with the Committee on Job Creation, Economic Development and Consumer Affairs on Monday, Nov. 28, 2005. Among other members of the Wisconsin Aerospace Authority Coalition, we look forward to discussing SB 352 with you and the other members of the committee.

This bill creates an organization in Wisconsin that will lead and direct our states opportunity in the rapidly developing commercial space industry. Further, it positions Wisconsin as a key player as a regional spaceport, and develops and expands industry opportunities within the state.

To help you prepare, we've enclosed some materials for you to review. I also welcome/your questions regarding this legislation. (Cell: 920-217-7787)

Sincerely,

George D. French Jr.

cc: Members, Senate Committee on Job Creation, Economic Development and  
Consumer Affairs

# Wisconsin Aerospace Authority Coalition

November 23, 2005

## MEMORANDUM

TO: Members of the Wisconsin State Senate  
Members of the Wisconsin State Assembly

FROM: Wisconsin Aerospace Authority Coalition

RE: **Support for SB 352**

This coalition of 19 statewide aerospace organizations urges you to support SB 352, which will create the Wisconsin Aerospace Authority (WAA). The bill has been modeled after existing legislation in Florida, Oklahoma, Alaska, and California. The WAA would oversee the design, development, and operation of the Wisconsin Spaceport at Spaceport Sheboygan. WAA would foster the industries that would provide services related to spaceports, aerospace facilities, and spacecraft in Wisconsin.

### What is the WAA?

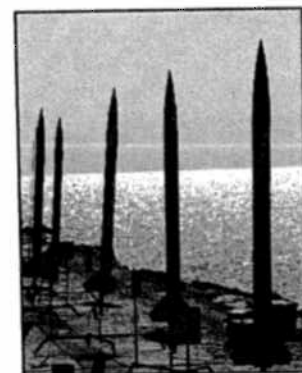
This bill creates a board of directors for the Wisconsin Aerospace Authority (WAA): six members appointed by the Governor from business and industry with the advice and consent of the Senate; one member of the Senate, appointed by the President of the Senate; one member of the Assembly, appointed by the Speaker of the Assembly; and the Director of the Wisconsin Space Grant Consortium.

### Why is Spaceport Sheboygan unique?

Spaceport Sheboygan, located at 43.74 N and 87.73 W, has an ideal orbital inclination for spacecraft to reach the International Space Station. Spaceport Sheboygan is uniquely positioned as a regional spaceport because the location has FAA restricted air space and a military operations area next to the Lake Michigan shoreline. The Wisconsin DOT has already granted site approval.

### Why does Wisconsin need a Spaceport Authority?

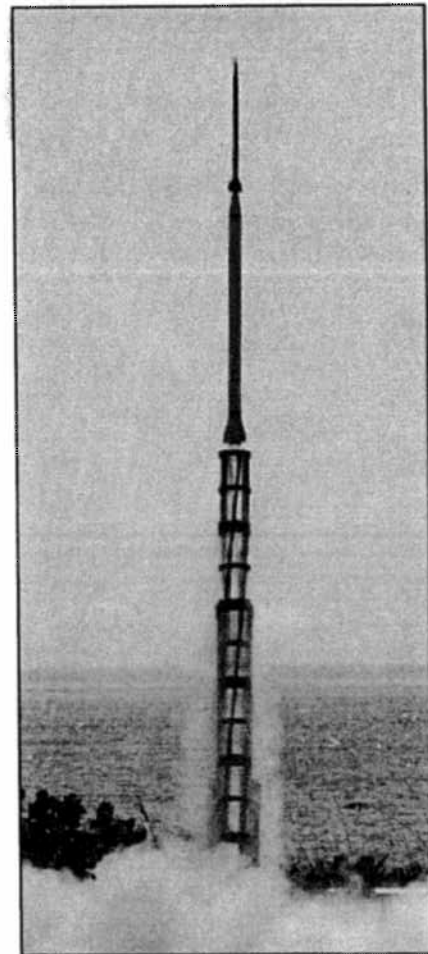
The Wisconsin Aerospace Authority would conduct aerospace services that promote, advance, and facilitate space exploration and space-related commercial, technological, and educational development. Futron Corporation, a world renowned research and consulting firm, forecasts suborbital space travel in 2021 will include more than 15,000 passengers flying annually, representing revenues in excess of \$700 million. Combined with orbital space travel, revenues are expected to be in the billions. The creation of a Spaceport Authority would allow Wisconsin to capitalize on these launches. Among other developments, the creation of WAA would also positively impact the creation of new jobs, new businesses, and educational and outreach opportunities, as well as increase tourism for the state of Wisconsin.



City of Sheboygan  
Space Explorers, Inc.  
Wisconsin Space Grant Consortium  
Wisconsin Center for Space Automation and Robotics  
Juneau County Economic Development Corporation  
Great Lakes Spaceport Education Foundation, Inc.  
Sheboygan Development Corporation  
Sheboygan Chamber of Commerce  
Space Education Initiatives, Inc.  
Wisconsin Space Business Roundtable  
Astronautics Corporation of America  
Orbital Technologies Corporation  
AIAA – Wisconsin Section  
Aerogel Technologies, LLC  
Wisconsin Space Institute  
Rocketplane Limited, Inc  
KT Engineering  
UW Space Place  
Planet LLC

# Wisconsin Aerospace Authority

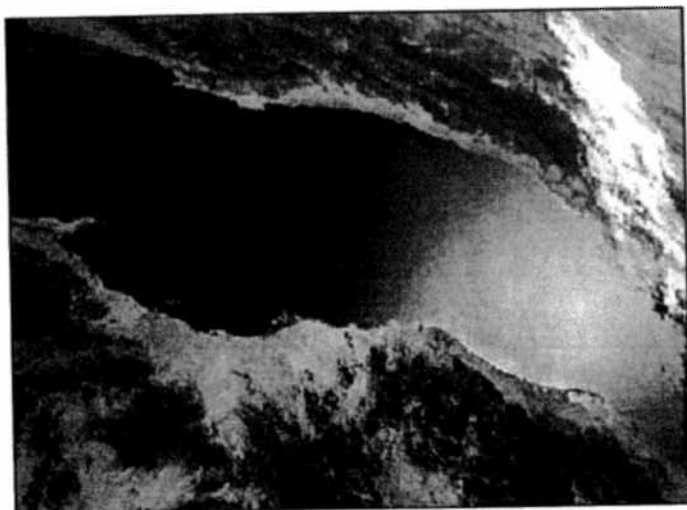
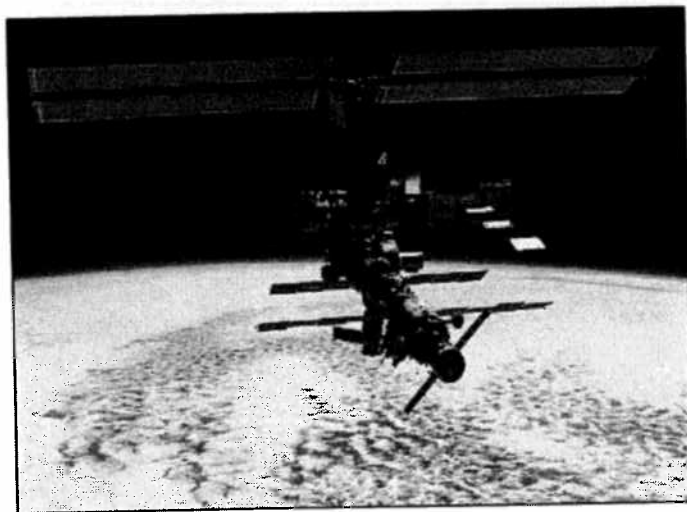
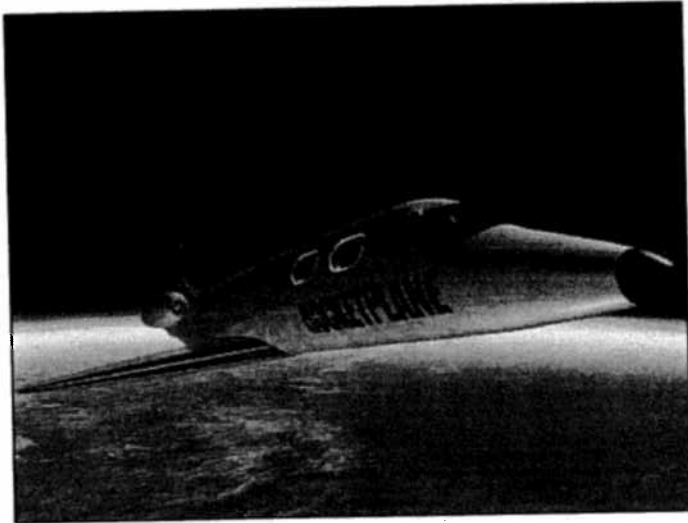
## Wisconsin's Space Program Assets



- ***Rockets for Schools***  
Spaceport Sheboygan has hosted this program since its inception in 1995. Each year, more than 600 students and thousands of tourists from Wisconsin, Illinois, Iowa, Michigan, and Minnesota participate in successful suborbital educational launches at this Midwest regional center.
- ***National Coalition of Spaceport States***  
Wisconsin is a founding member of the organization, which consists of four heritage spaceports states and nine states in different stages of spaceport development. This group has formed strategic alliances with Kennedy Space Center, called ASTWG and ARTWG. Representatives from Kennedy have offered assistance in developing infrastructure for operational, safety, and launch and control systems to operate the spaceport with universal compatibility and national standardizations.
- ***Wisconsin Space Grant Consortium (WSGC)***  
Housed at the University of Wisconsin-Green Bay, Wisconsin's NASA-designated Consortium, is comprised of 32 colleges and universities, as well as additional state agencies and businesses.
- ***University of Wisconsin-Madison***  
NASA's Center for the Commercial Development of Space is located at UW-Madison's College of Engineering. Its areas of expertise include Astrofuels, Astroculture, and Astrorobotics. The university is also home to the Wisconsin Center for Space Automation and Robotics (WCSAR), which regularly flies experimental science payloads to the International Space Station. Additionally, UW-Madison's Planetary Science department annually receives \$11-15 million in research and data storage funding from NASA.
- ***Orbital Technologies Corporation***  
Located in Madison, Orbitec is one of the finest small research and development businesses in the United States. NASA awarded the company \$58 million, the largest small business hardware purchase NASA has ever awarded, for an interior racking system used for installation and experiments on the International Space Station. Orbitec's patented re-useable rocket engine has the potential to revolutionize the Space Launch Industry.
- ***Astronautics Corporation of America***  
Located in Milwaukee, Astronautics is a world leader in design, development, and manufacture of military and commercial electronics for air, space, land, and sea applications.

# Wisconsin Aerospace Authority

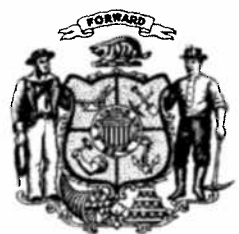
## Spaceport Sheboygan Market Potential



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



# WISCONSIN STATE LEGISLATURE





# Joe Leibham

STATE SENATOR

**State Senator Joe Leibham  
Testimony on Senate Bill 352  
November 28, 2005**

Good Afternoon. Chairman Kanavas and other distinguished committee members. I appreciate you holding this hearing on Senate Bill 352, legislation that I authored with Representative Steve Kestell to create the Wisconsin Aerospace Authority (WAA) and to designate the Sheboygan Spaceport.

Recently, you may have heard of the proposal by a group of Sheboygan area citizens, many of whom you will hear from today, who are exploring the potential of developing an Aerospace Science and Education Center on Sheboygan's lakefront. This 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 a center that offers 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 and ask you to do the same.

Under Senate Bill 352, 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.

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[www.leibhamsenate.com](http://www.leibhamsenate.com)

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.

While this legislation will have significant educational and economic impact on the Lakeshore Region, the broader goals of this legislation will have a dramatic impact on the state's 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. Futron, a leading aerospace technology consultant, forecasts that more than 15,000 passengers could be flying annually by 2021, representing revenues in excess of \$700 million.

As the FAA/AST predicts a "growing part of the commercial space transportation industry in the United States is the development of private or state-operated launch, re-entry, and processing sites known as "spaceports." Several states are developing commercial spaceports within their borders. These spaceports can provide space transportation service providers and their customers with an alternative to the traditional U.S. federal launch sites and ranges operated to either the U.S. Air Force or the National Aeronautics and Space Administration (NASA)."

In Fiscal Year 2004, private and public entities in the State of Wisconsin were awarded more than \$19 million in contracts from NASA. However, Wisconsin has the potential to further develop this industry through the passage of SB 352 and the creation of the Wisconsin Aerospace Authority (WAA).

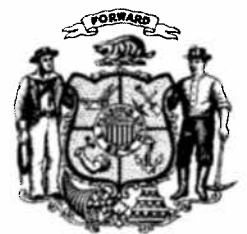
In addition to planning and executing a Spaceport in Sheboygan through the use of federal and private funds, this legislation would direct WAA to analyze trends in the aerospace industry and recommend actions to be taken by the state to compete in the global aerospace industry, coordinate efforts of various government units and private parties interested in the promotion of space-related industry and promote this state's aerospace industry.

Through this measured, analytical approach, WAA will help to provide a strategic roadmap to further the State of Wisconsin's aerospace industry to ensure that any future investments would be best spent to ensure the largest return on investment for the citizens of the Wisconsin.

As a result, I ask you to support Senate Bill 352 and appreciate you taking the time to hold this hearing today.



# WISCONSIN STATE LEGISLATURE





**Statement of  
Christina Paape  
In Support of SB 352  
Creation of the Wisconsin Aerospace Authority  
November 28, 2005**

Thank you to the members of the Senate Committee on Job Creation, Economic Development and Consumer Affairs for allowing us this opportunity to discuss SB 352 with you in more detail this afternoon.

The Wisconsin Spaceport has been the home to the Rockets for Schools launch since its inception in 1995. Super loki rockets have launched up to 34 miles in altitude from this location, drawing upwards of 10,000 people to witness the sub-orbital launches.

We are proposing building a spaceport parallel to Sheboygan's East coast shoreline at Spaceport Sheboygan. This Spaceport would conduct both horizontal and vertical launches. Officials from Kennedy Space Center in Florida have visited the site and recognized the feasibility of Spaceport Sheboygan as a regional spaceport. This would position Wisconsin as a key player in the upper Midwest, developing industries that would provide services related to spaceports, aerospace facilities, and spacecraft in Wisconsin.

With the creation of the Wisconsin Aerospace Authority, members of the Board of Directors will be able to further the development of an actual spaceport in Wisconsin. As precluded by George French, there are a number of factors that make Spaceport Sheboygan an ideal location for a Spaceport. First of all, similar to Florida's Cape Canaveral, Sheboygan has an eastern coast. Unlike other land-based prospective areas, Lake Michigan offers an uninhabited Military Operations Area (MOA) and a Federal Aviation Administration (FAA) restricted flyover zone. Positioned at 43°45' North latitude, this spaceport would have an ideal orbital inclination for NASA to reach the International Space Station. It also has relatively shallow water depth conditions, ranging from about three to 27 ft deep. Furthermore, the Wisconsin Department of Transportation has granted a site license for location.

The legislation authorizes the creation of the Wisconsin Aerospace Authority, which would be made up of nine individuals. Six members would be appointed by the governor, with the advice and consent of the Senate. The authority would also include one member of the Senate, appointed by the President of the Senate; one member of the Assembly, appointed by the speaker of the Assembly; and the Director of the Wisconsin Space Grant Consortium.

Together, the Board of Directors will plan and execute the development of Spaceport Sheboygan. As an initial task, they will be charged with conducting environmental and safety studies on the location. The Board will lay the groundwork for the foundation that will strengthen Wisconsin's role in the emerging space industry.

The U.S. Department of Labor's Bureau of Labor Statistics estimates a growing need for high skill professionals in the next few years. Biomedical engineers, biophysicists, microbiologists, geoscientist, chemist, and environmental, biological, and materials scientist are among the high skill professions expected to require an increased workforce through 2012. High-technology jobs in computer and information system management, electronics engineering, data communications analysis, and network and computer systems administration will also require additional manpower. Spaceport Sheboygan will offer opportunities to develop people's abilities and recruit high skilled professionals to Wisconsin.

As you can see from the people present today, the Wisconsin Aerospace Authority Coalition, industry, community, and legislative supporters, the support for this project has been astounding. We are all enthused and invigorated by the opportunities that this legislation brings.

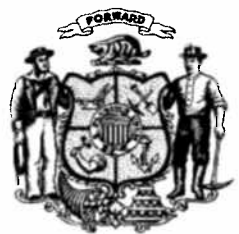
In closing, I'd like to thank you again for the opportunity to appear before you regarding SB 352. Thank you for your consideration of this bill for the creation of a Wisconsin Aerospace Authority.

Sincerely,

Christina Paape  
Vice President, Space Explorers, Inc.  
Pro-bono staff, Exploratory Wisconsin Aerospace Authority Pilot Committee  
Ph: 920-339-4600, ext. 229



WISCONSIN STATE LEGISLATURE





Senate Committee on Job Creation, Economic Development and Consumer Affairs

Hearing on Senate Bill 352, November 28, 2005

Support Testimony: VANDEWALLE & ASSOCIATES, Economic Development Specialists, Madison, WI

Represented at the Senate Hearing By:

Jolena Presti, Redevelopment Planner

Supported by Brian Vandewalle, AICP, President and Principal Planner

---

The convergence of aerospace industry experts, educational institutions, private and nonprofit organizations, specialists in the aerospace industry in Wisconsin, and the proximity of the Midwest spaceport in Sheboygan provides a rare opportunity to create this compelling regional institution.

As commercial space travel has become more than just a futuristic notion, the tremendous economic opportunity of the industry has become evident. As home to the Midwest's only proposed commercial spaceport and launch site, Wisconsin has the opportunity to not only preserve the restricted airspace off of Sheboygan's lakeshore but also to develop it as the region's aerospace industry center.

Currently Wisconsin leads the Midwest in the commercial space industry. Aerospace leaders in the state have developed the infrastructure to establish the Wisconsin Aerospace Authority (WAA) and have proposed use of the FAA restricted airspace in Lake Michigan for a commercial spaceport. While Wisconsin currently leads the Midwest, other states in the region recognize the economic potential of location of a commercial spaceport and related aerospace services, research and development within their state. In order to stay ahead of neighboring states, Wisconsin needs to solidify this lead by instituting the WAA through Bill 352.

The WAA will anchor Wisconsin's economic position in the field of aerospace technology. The WAA will allow the State, educational institutions, and private and nonprofit organizations to secure funding, create jobs, and further statewide economic growth in the aerospace industry.

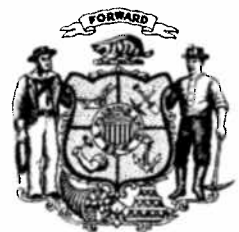
### **Vandewalle & Associates**

120 East Lakeside Street • Madison, Wisconsin 53715 • 608 255-3988 • 608 255-0814 Fax  
611 North Broadway • Suite 410 • Milwaukee, Wisconsin 53202 • 414 441-2001 • 414 732-2035 Fax  
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# WISCONSIN STATE LEGISLATURE



**Testimony  
in Support of  
Legislation for the Establishment  
of the  
Wisconsin Space Authority [SB-352]  
[Room 411 South]  
by  
Dr. Eric E. Rice  
President/CEO/COB  
ORBITAL TECHNOLOGIES CORPORATION [ORBITEC]  
Madison, WI  
28 November 2005**

Good afternoon, my name is Eric Rice, I'm President and CEO of Orbital Technologies Corporation, located on the west side of Madison. I'm also Chairman of the Wisconsin Space Institute (WSI). Brief summaries about ORBITEC and myself are given in attachments.

ORBITEC and WSI supports the creation of the Wisconsin Space Authority and applauds Senator Joe Leibham others in the state for this initiative.

Since 1984, my business partners, our staff and myself have been working hard to increase aerospace activity in this state. We have been doing all we can to bring more federal dollars and commercial space dollars into the state's economy. ORBITEC has been the state's leader in bringing in federal R&D funds through the Small Business Innovation Research Program working with NASA and the DOD.

The ORBITEC™ (Orbital Technologies Corporation) mission is to: Serve government and industry by developing and demonstrating innovative technologies and advanced products that enhance the quality of human life and support mankind's exploration of the Universe.

ORBITEC has won the annual SBIR Tibbetts award in 1996 and again in 1999.

ORBITEC has been awarded 188 federal government contracts to date. ORBITEC has also been selected for a total of 131 SBIR/STTR contracts worth over \$33M, including: 89 Phase I awards and 42 Phase II awards. We have won many Phase III awards and have led the nation in NASA Phase III's.

We conduct R&D, concept and technology development, and implement product development on the following systems:

- Space Transportation, Propulsion, Power and Propellants
- Space Resources and Space Exploration
- Space Human, Animal and Plant Habitation
- Space Flight
- Astronaut Crew Training.

We have supported the Sheboygan Rockets for Schools Program since its inception and we hope to launch a sounding rocket that uses our unique vortex combustion rocket

engines from Space port Sheboygan in the not too distant future. We are working with aerospace companies in CA to make this happen.

We are developing LOX/HC vortex rocket engines under commercial and USAF sponsorship. We are testing at the US Army Badger Army Ammunition Plant in Baraboo. We hope to manufacture large main Launch vehicle rocket engines for the USAF, NASA, and Rocketplane of Oklahoma.

We are also planning both low-cost liquid and hybrid-based launch vehicles that could be one day launched from spaceport Sheboygan.

We have also shared with the spaceport group in Sheboygan with our ideas for education and outreach and adventure rides and amusement themes.

I recommend that the WSA consider, through the DNR the development of a space incubator for testing and other activity on some of the land and at some of the existing facilities at the Badger Army Ammunition Plant that is being closed.

I also recommend that the board members of the WSA should be aerospace professionals from businesses and universities within the state.

Thank you. It has been a privilege to communicate with you today. Any questions?

## ORBITEC OVERVIEW

The ORBITEC™ (Orbital Technologies Corporation) mission is to: ***Serve government and industry by developing and demonstrating innovative technologies and advanced products that enhance the quality of human life and support mankind's exploration of the Universe.***

Headquartered in Madison, Wisconsin, ORBITEC, began operations in 1988, led by Dr. Eric E. Rice, Mr. Ronald R. Teeter, and Mr. Thomas M. Crabb, whose combined experience in the aerospace industry now exceeds 103 years. Dr. Rice is ORBITEC's President/CEO and Chairman; Mr. Teeter is VP/COO and Secretary; and Mr. Crabb is VP/CFO and Treasurer. Mr. William H. Knuth serves as our Chief Engineer. Mark Lee, former Space Shuttle Astronaut, leads some of our Space Flight Projects. In addition to our ~70 engineering, scientific, and support employees, ORBITEC has cultivated a network of 52 talented associate engineers and scientists in Madison and across the nation to support our research efforts.

ORBITEC continues to be Wisconsin's industry leader in the Small Business Innovation Program and R&D funding from the Federal Government. In 1995, ORBITEC was awarded the Wisconsin Professional Service Business of the Year Award. On June 5, 1996, in Washington DC, ORBITEC was awarded a prestigious 1996 SBA Tibbetts Award for its leading work in the SBIR program. In 1999, ORBITEC was again presented the Tibbetts Award for its outstanding work for NASA/ARC on the BPS Phase III effort to build spaceflight hardware.

ORBITEC's current in-house and externally sponsored advanced-technology development activities focus on:

- Space Transportation, Propulsion, Power and Propellants
- Space Resources and Space Exploration
- Space Human, Animal and Plant Habitation
- Space Flight
- Astronaut Crew Training.

ORBITEC government project sponsors to date have included: NASA (JSC, MSFC, GRC, KSC, SSC, ARC, LaRC, DFRC, HQ, NIAC); USAF (RL, WPAFB, HSD, Tyndall); US Army (MICOM, HEL, Aviation and Troop Command); FAA/DOT; and BMDO.

ORBITEC corporate headquarters is located at 1212 Fourier Drive, Madison, WI 53717. ORBITEC occupies ~27,000 square feet in the "space center" facility located in the expanding Old Sauk Trails Business park on Madison's west side. ORBITEC developed this center to provide significant office, laboratory, test, manufacturing, computer, and conference facilities. A cryogenic lab, class 100,000 cleanrooms for space hardware development, wet lab, machine shop, electronics lab, materials lab, and project work areas are available as needed for R&D projects.



Additionally, ORBITEC has use of a 5000 ft<sup>2</sup> remote ballistic laboratory that has two remote rocket engine test cells and supporting instrument rooms which can be used for hazardous rocket/combustion testing or operations. The lab is located on the 7500-acre Badger Army Ammunitions Plant (BAAP) near Baraboo, WI .

By locating in Madison, Wisconsin, and by developing close working relationships with the University of Wisconsin (UW), significant technical resources provided by UW (faculty, staff, students, research laboratory facilities/equipment, and libraries) are available to support ORBITEC R&D projects on an economical basis. The UW has significant biological, nuclear, chemical, electrical, mechanical, combustion, materials research, and engine facilities. In addition, ORBITEC has use of the UW Libraries for our technical staff. The university faculty, graduate, and undergraduate students, provide creative ideas and new technology that can be used for corporate growth. UW faculty consultants and highly-qualified students, having expertise in needed areas, may be obtained on an as-needed basis. Many of our highly-talented employees are previous and current students of the UW. The UW is one of the largest public research universities in the nation, with over \$500 million/year in R&D activity. This provides a large technology base that ORBITEC can use.

ORBITEC is also involved with other educational institutions, including: Georgia Technical University, Utah State University, Michigan Technical University, Penn State University, The Ohio State University, UW-Milwaukee, University New Mexico, University of Illinois, University of Alabama-Huntsville, University of Tennessee, Lamar University, Colorado School of Mines, University of Texas at Dallas, Cornell University, Purdue University, University of North Carolina, North Dakota University, University of Missouri-Rolla, and others.



**DR. ERIC E. RICE**  
**BIOSKETCH (11/05)**

**DR. ERIC E. RICE, President/CEO/COB** of Orbital Technologies Corporation (ORBITEC), Madison, Wisconsin; he has over 38 years of aerospace experience. He has served as Principal Investigator for many R&D contracts through out his career. He has served as a part-time Adjunct Professor at the University of Wisconsin - Madison in the College of Engineering, Engineering Mechanics Department where he has developed a course called "Space Transportation and Propulsion". He served as the 1991-1992 Chairman and is a current member of the AIAA Space Transportation Technical Committee and he founded and led the AIAA Space Colonization Technical Committee, that focuses on space tourism, space resource development and space exploration.

While in graduate school at The Ohio State University, he performed research at the Aeronautical and Astronautical Research Laboratory, under the direction of the late Professor Rudolph Edse (x-German Rocket Scientist), as a Graduate Research Associate and Research Fellow. He conducted combustion research for rocket and ramjet engines. He also conducted ignition studies of different fuels in shock tubes and flowing systems. He performed research in photochemically initiated weak detonation waves and is noted for being the only person to create a weak detonation in supersonic flows in a laboratory.

Before graduate school, Dr. Rice worked for NASA Lewis Research Center, as a Aerospace Engineer involved in rocket engine test firings (20,000 lb<sub>f</sub> H/O rocket tests that supported the evaluation of heat transfer in the throat and nozzle).

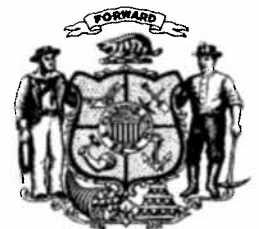
In his work at Battelle from 1972 through 1984, he worked on many advanced space projects over a 12-year period, including: Space Shuttle, ELV and upper stage analysis, Space Shuttle SSME diagnostics, electromagnetic launcher design and analysis; transatmospheric vehicle concept development and analysis (evolved into the NASP Program); atmospheric dispersion modeling, space systems environmental impact assessments, cost analysis for space systems, space systems energy analysis, nuclear waste disposal in space analysis, risk assessment of nuclear waste disposal in space, Skylab reentry hazard analysis, and space debris analysis.

Before starting ORBITEC, Dr. Rice was Director of the Astronautics Technology Center, reporting to the CEO of the Astronautics Corporation of America. While at Astronautics, Dr. Rice spearheaded an University/Industry space task force, which directly resulted in Wisconsin receiving a NASA Center for the Commercial Development of Space - Wisconsin Center for Space Automation and Robotics (WCSAR).

Dr. Rice has his BS degree in Chemistry from the University of Wisconsin and his PhD degree in Astronautical and Aeronautical Engineering from The Ohio State University. Dr. Rice's professional society activities are as follows: Founder and Chairman (2002-2005) AIAA Space Colonization Technical Committee; 1991-1992 Chairman and current member, AIAA Technical Committee on Space Transportation; past member AIAA Nuclear and Future Flight Technical Committee; past member and chairman of the AIAA Microgravity and Space Processes Technical Committee; AIAA Fellow, NIAC Fellow: former founding Chairman, AIAA Wisconsin Section; Alumni Member, AIAA National Technical Committee on Space Systems; member, member, American Astronautical Society; Chairman, Wisconsin Space Institute; member National Space Society. In 1998, he was named Distinguished Alumnus from Ohio State and delivered the Professor Edse lectureship on Advanced Propulsion. He has over 140 publications.



# WISCONSIN STATE LEGISLATURE





**Richards, Mike**

**From:** Gasper, Greg

**Sent:** Monday, November 28, 2005 12:24 PM

**To:** Richards, Mike

**Subject:** FW: Update on Meeting Attendees

**TED KANAVAS**  
STATE SENATOR

SB 352  
?

**From:** Schutt, Eric

**Sent:** Monday, November 28, 2005 8:45 AM

**To:** Guarasci, Patrick - Office of Governor Jim Doyle

**Cc:** Schutt, Eric; Matzen, David; Grothman, Jeffrey; Emerson, James; Reineking, Carol

**Subject:** Update on Meeting Attendees

Patrick,

As of right now, here is the list of local attendees for the 11 a.m. meeting in the Governor's Conference Room.

Legislators

Senator Leibham (Senate Legislative Lead)

Senator Grothman (Senate co-sponsor)

Representative Kestell (Assembly Legislative Lead)

Representative LeMahieu (Assembly co-sponsor)

Representative Van Akkeren (Assembly co-sponsor)

Rocketplane and Space Explorers

George French

Ross Nova

Chrissy Paape

Dr. Weigia Zhou

Wisconsin Space Grant Consortium

Sharon Brandt

Sheboygan County Chamber of Commerce

Dee Olsen

Sheboygan Development Corporation (SDC)

Dennis Ladwig

Jim Testwuide

Jolena Presti

Staff

Eric Schutt

Thanks,

Eric

Eric Schutt

Chief of Staff

Senator Joe Leibham

9th Senate District

Eric.Schutt@legis.state.wi.us

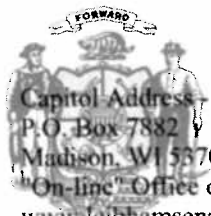
Phone: (608) 266-2056

STATE CAPITOL

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11/28/2005



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Madison, WI 53707-7882

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State Web Page - [www.wisconsin.gov](http://www.wisconsin.gov)

# TED KANAVAS

STATE SENATOR

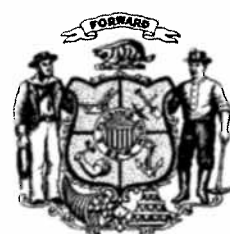
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11/28/2005



# WISCONSIN STATE LEGISLATURE



**Statement of George D. French, Jr. in Support of SB 352**

**Creation of the Wisconsin Aerospace Authority**

**November 28, 2005**

Mr. Chairman, members of the Senate Committee, I am here to support the WAA bill. This bill creates an organization in Wisconsin that will enhance our state's opportunities in the rapidly developing commercial space industry. Technology advances in aerospace flight systems, combined with world and domestic investments in spaceports, recently passed federal legislation to support space commerce, and a clearer definition of the new commercial space markets. US government needs to create regular and reliable space transportation and operations systems. Significant commitments of capital are now being made by NASA, the Air Force, and the private sector. These converging needs and funding have lead to new markets in the emerging commercial space industry. The U.S. Department of Commerce, Futron, and Zogby have all done in-depth studies of this market and have it building to roughly \$1 billion annual revenue market by 2020 in suborbital space tourism alone.

Wisconsin's role in this emerging industry can include a significant position as a regional spaceport provider. This will build on our current NASA-supported organizations composed of universities and businesses throughout the state. Wisconsin ranks in the high 40s on return of federal dollars to the state, but 19<sup>th</sup> in NASA spending. As a center of regional U.S. space transportation, Wisconsin would benefit from research and development, and economic growth that will continue to increase as this industry evolves. This industry fits with our state's natural resources, our dedication to math and science education, our existing university space organizations, and our diverse business base in space-related research and delopments.

Wisconsin will be building on a foundation that already exists. The Wisconsin Aerospace Authority is an organization we believe is necessary to help lead our state into this opportunity-rich market.

Why Wisconsin? Three of the four heritage spaceports in the U.S. launch over water. Half launch from their east coast over water with the spin of the earth. They are at Kennedy Space Center in Florida and Wallops Island in Virginia. Wisconsin, too, has an east coast and we can use Lake

Michigan as a launch range. Lake Michigan has an FAA flight restricted area off the coast of Sheboygan and an overlapping military operations area that stretches almost to the Michigan border.

Through an education program started in 1995, called Rockets for Schools in Sheboygan, Wisconsin has already launched several suborbital rockets and is recognized by the FAA as a suborbital launch site. We established a regional coalition of four states (Wisconsin, Illinois, Michigan, and Iowa) that can form the base to include more states and establish Wisconsin as a hub for the Midwest space access. These unique physical and governmental resources can help us build and operate a regional spaceport.

Where is NASA in this?

1. NASA has left suborbital space to the private and university sectors.
2. NASA needs commercial aerospace help to reduce the cost to access the International Space Station and produce regular and reliable transportation to the Station. Shuttle is being retired in 2010 and has to be replaced.
3. Kennedy Space Center has sent personnel to inspect the Sheboygan spaceport as a site for an regional spaceport and has pledged its support to help us.

What are the commercial space markets?

- Suborbital tourism is a \$3 billion market in the medium term. It will grow at a quick rate once safety and regularity are demonstrated.
- Spaceports will become similar to airport operations. Fewer passengers at higher dollars spent per flights.
- Microgravity in sub-orbit may be a \$50 million market. NASA purchases will jump start this market.
- Space qualification of instruments and people will fit into the rides and payload markets to enlarge them.
- Existing constellations of satellites are approaching the end of their useful life. These satellites were initially put into orbit by expendable launch systems. We'll



need to replace these satellites with reusable launch systems. Reusable launch systems can be quicker than past expendable launchers.

- International Space Station (ISS) tourism, payload delivery, and down mass are currently being bid by NASA. Next week the first of the requests for proposals come out. The ISS will be a permanent housing platform. There are 16 International partners there now. In ten years, 2-3 times that number involved. Currently, rich people are gladly paying \$20 million each to go to the ISS.
- Lunar Surface Tourism and power are the true destinations for mankind. The moon is the gas station for the solar system and will give us the answer to unlimited power for the earth for the next 1,000 years. And it will be cleaner energy. UW Madison's Fusion Institute is the forefront on this research field.

The rest of the world also recognizes this. China and Japan are both headed to the Moon. Adventure travel company Space Adventures has offered two seats at \$100,000,000 each for a trip on the Russian Rockets around the Moon and back.

#### Spaceports Around the World

There are 20 existing and developing spaceports outside of the US today. There are 11 developing in the US now. Sheboygan has set itself up to become a suborbital and orbital spaceport.

What are other states in the US doing?

- New Mexico has committed \$100 million to help develop their spaceport and \$11 million to attract the X-prize Cup.
- Oklahoma has spent millions upgrading the second largest runway in the US. (An old strategic air command base SAC) and a \$15 million tax credit to attract suborbital tourists that Rocketplane Limited will take to space and back regularly and safely. It will be a one hour ride, including four minutes of zero gravity and a life-changing view of our planet from space for \$200,000 per person.

The initial commercial market for most of the new spaceports will be personal space travel.

After a horizontal take off, the space plane climbs to 20,000 ft., fires its rockets and climbs to 350,000 ft. Passengers experience 3-4 minutes of weightlessness. Passengers get to view a sunbathed Earth from black space and then the vehicle descends to 20,000 ft. again where the engines are started and the Rocketplane glides to its landing. The jet engines are the back-up system.

What are the time frames?

(see power point)

Where is the early money coming from?

Both NASA and the Air Force will spend more than \$1 billion in the next few years on a program to build medium launch vehicle to carry payloads to orbit and passengers to the International Space Station. Private investment totals more than \$1 billion from the leading-edge entrepreneurs in business and technology.

My Oklahoma Company Board of Directors and Management Team

(see power point)

I have tried to shine a light on what is the coming future in space and how Wisconsin can effectively, efficiently, and profitably play a significant role in it. I thank you for your time and your support of this legislation.

Sincerely,

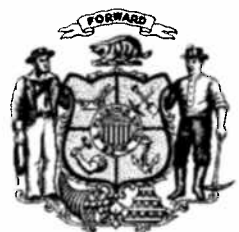
George D. French, Jr.

President and CEO, Rocketplane Limited, Inc.

Cell: (920) 217-7787



# WISCONSIN STATE LEGISLATURE



Margaret A. Farrow  
W262 N2402 Deer Haven Drive  
Pewaukee, WI 53072

November 28, 2005

Comments presented regarding SB 352

To the extent that I understand the proposed legislation, I believe to be important. I might note that this is the first time I have appeared at a hearing to support a bill since leaving office. I would also add that I appear on behalf of myself. I am not employed by anyone and have no personal interest or gain from making this statement.

During my tenure as Lieutenant Governor, I served, on behalf of the state of Wisconsin, as a member of the Aerospace States Association, a national organization formed by lieutenant governors from the state with research and manufacturing interests in space. I became aware of the numerous and diverse areas of research and manufacturing related to space exploration and travel that we have in Wisconsin.

As a legislator and as a lieutenant governor I made numerous attempts to look outside traditional areas of opportunities when looking for solutions to economic, employment, and educational improvements.

This proposal focuses on a very new concept. It educates all Wisconsin residents by giving all of us an understanding of our planetary position related to a window to space. It exposes the prime location for space launches and travel that exists on the shores of Lake Michigan in Sheboygan

Just as Buck Rogers was considered entertaining fiction only to have that writing become reality in our space program, we can expect those lacking in vision and scientific knowledge to

scoff at this concept and delay through ignorance what should begin to move forward as soon as possible.

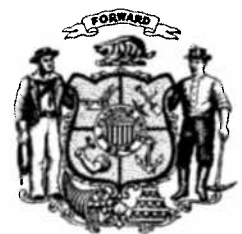
I strongly endorse this legislation and the development of a Wisconsin Aerospace Authority that it contains. Those who enjoy boasting of a progressive philosophy in Wisconsin should realize the progress of the 21<sup>st</sup> century will be made for our state with steps in the direction that this bill takes us as a state.

I would hope this committee will move this bill along its deserved path to ultimate passage.

Thank you for your attention.



# WISCONSIN STATE LEGISLATURE



**Statement of  
Delores E. Olsen, Executive Director,  
Sheboygan County Chamber of Commerce  
In Support of SB 352: Creation of Wisconsin Aerospace Authority  
November 28, 2005**

Members of the Senate Committee on Job Creation, Economic Development and Consumer Affairs and other legislators present, I thank you for the opportunity to appear before you regarding SB 352 in support of the creation of a Wisconsin Aerospace Authority. The individuals who appeared before me today clearly spoke to benefits of establishing this commission. Today the Center is a dream. For dreams to come true, incremental steps must be taken to make dreams a reality.

While still a dream, this project is backed with significant national interest from the aerospace industry and professionals and is also solidified by the strength of passionate community involvement and private investors who are convinced this project will enhance our future growth and expansion.

Sheboygan County already ranks ninth in the State of Wisconsin in dollars spent by tourists. Our world-class resorts, golf courses and cultural attractions define our role as a destination market. The PGA Championship served the entire state with a \$74 million impact, according to the Department of Tourism Economic Impact Statement. That was a one-week event.

The spaceport will be open year-round. We anticipate science classes throughout the Midwest coming for weeklong stays to visit this interactive icon.

The Wisconsin Aerospace Authority will impact our economic future in many ways. A Wisconsin Aerospace Authority will aid in creating a scientifically literate population. Companies like Lockheed and ORBITEC, as they look to new development opportunities may consider Sheboygan County for their future

location. The spin-off business development of technological and science based industry is almost certain as these companies see the economic advantage of location, location, location. In 2004 we saw more than \$120 million dollars in new construction investment! Sheboygan County is positioned to assist companies with an interest in locating here with unique advantages.

The creation of jobs and technology-based businesses will enhance the economy of the State of Wisconsin and the upper Midwest, positioning Wisconsin as a space transportation center, capitalizing on our existing technology assets.

It's time to bring Sheboygan, and the State of Wisconsin, to the new frontier of space exploration. What better place to begin than in the dreams of children?

We can't do it alone. The creation of the Wisconsin Aerospace Authority will provide the impetus for us to facilitate services that will bring results.

Our hope for the future of our economy rides with a dream and determination. Our hope for technological progress rides with establishing a Wisconsin Aerospace Authority. Our hope for the reality of Spaceport Sheboygan rides with the establishment of a Wisconsin Aerospace Authority. We urge you to pass Senate Bill 352. Thank you!





**SENATE COMMITTEE ON JOB CREATION,  
ECONOMIC DEVELOPMENT, AND CONSUMER AFFAIRS  
November 28, 2005**

**2005 Senate Bill 352**

**Testimony of Ross J. Nova on behalf of the  
Wisconsin Aerospace Authority Coalition**

**INTRODUCTION**

Modeled after authorizing legislation in Florida, Oklahoma and Alaska and drawing heavily on Wisconsin Statute Chapter 114, 2005 Senate Bill 352 creates the Wisconsin Aerospace Authority (the "Authority"). A public/private partnership much like Forward Wisconsin, the Authority combines the clout the State of Wisconsin with the financial and practical expertise of private industry to give the Authority the power and flexibility to quickly and efficiently position the Authority as a catalyst for economic growth in the area of space transportation, education and tourism. The legislation creating the Authority mirrors numerous other quasi-agencies already in existence in Wisconsin and will mirror its counterparts in at least five (5) other states.

**LEGAL PRECEDENT EXISTS FOR THE AUTHORITY**

- Virginia, Florida, Texas, Oklahoma, Utah, New Mexico, Nevada, California and Alaska have all created some form of aerospace or spaceport authority.
- The State of Florida authorized Cape Canaveral, the launch site of the space shuttle and Apollo rockets. It could not exist but for legislation passed by the State of Florida similar to 2005 Senate Bill 352.
- The majority of the Authority legislation was modeled after Wisconsin Statute Chapter 114, authorizing the creation and operation of airports.

## COMMON QUESTIONS

- Q: Will the Authority be able to ignore State environmental regulations?

A: No. Environmental impact studies will be preliminary to the Authority receiving Federal Aviation Administration (FAA) certification and will be subject to the Department of Natural Resources' (DNR) oversight. The Authority will be subject to the same environmental rules to which airports are subject.

- Q: Is the power of eminent domain granted to the Authority overbroad?

A: No. The power of eminent domain granted to the Authority is exactly the same as is granted to any airport in Wisconsin. It is used primarily to control the height of buildings and vegetation on the aerial approaches to the airport/spaceport.

Airports and spaceports may exercise their eminent domain power to obtain land only as it relates to publicly held lands. An airport or spaceport can acquire private land only by purchasing it (not by using the power of eminent domain) only "for the protection of the aerial approaches" and only if the private property owner agrees to sell.

If the owner of any land, public or private, refuses to comply with the aerial approach restrictions established by the airport or spaceport, then the airport or spaceport may enforce the aerial approach restrictions by use of the eminent domain power, but the landowner has the right to petition for any damages created by those restrictions (i.e., removing trees). The scope and geographical area to which the ability to regulate land applies is limited.

- Q: Who has oversight of the Spaceport?

A: Just like any airport, there are many State and Federal agencies that will have oversight of the operation of any spaceport in Wisconsin, including, but not limited to, the Federal Aviation Administration (FAA), the National Aeronautics and Space Administration (NASA), the Environmental Protection Agency (EPA), the Wisconsin Department of Natural Resources (DNR), the Wisconsin Department of Transportation (DOT) and the Wisconsin Department of Administration (DOA).

- Q: Does the WAA get State funding and, if so, how much?

A: Yes. The DOT will provide funding for the erection of some public buildings and perhaps for the purchase of land. However, the amount of said funding is solely in the discretion of the Secretary of the DOT and does not involve any additional funding appropriations other than what is already provided to airports. The WAA is eligible for loan assistance from the DOA just as any other airport is. The WAA also has bonding authority that is subject to review by the Joint Committee on Finance. The State is not a guarantor of, or in any way responsible to redeem, bonds issued by the WAA.

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