



# AIAA Baltimore Section

<http://www.aiaa-baltimore.org/>

[NOTE new web address!]



## Newsletter, Summer 2006

*Carolyn Slivinski  
Editor*

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### Related Links

AIAA National Capital Section:  
<http://www.aiaa.org/portal/index.cfm?GetComm=181>

AIAA Delaware Section:  
<http://mywebpages.comcast.net/blackre2/index.htm>

AIAA New England Section  
<http://www.aiaa.org/sections/nd/>

### >> Chair's Corner: Pramud Rawat

We had our last program of 2005-6 year, the Awards Night, on 22 June at the Barton Room in JHU/APL. We honored Dr. Michael Nusca of the Army Research Lab in Abingdon, MD and Mr. Adrian Hill of JHU/APL as our co-winners of the Engineer-of-the-Year award. We also honored members who completed their 50, 40, and 25-year anniversaries of AIAA membership.

On 23 August we had the first Council meeting of 2006-7 year, devoted to the discussion of initiatives we can take in helping support K-12 education. The Council meeting on 7 September was devoted to the planning of the Annual Picnic on 1 October, the Lecture on the Russian Space Program on 19 October, YPSE-06 Conference (Young Professional, Student and Education Conference) on 10-11 November, and the joint program with SNAME (Society of Naval Architects and Marine Engineers) on *Use of UAVs in Naval Aviation* on 7 December.

In addition to the fact that attendance at Council meetings is open to all AIAA members, including Educator Associates, members are also encouraged to join the Council. The Council's work is done in Committees that deal with specific issues such as technical programs, pre-college programs, membership, etc. New Committees can be formed depending on Council member's interest. Council meetings are held once a month at the Johns Hopkins University, Applied Physics Lab, just south of Columbia, MD.

We hope you would consider attending a Council meeting soon (dates of this and other meetings are posted on our web site: <http://www.aiaa-baltimore.org/>) and then consider joining the Council. We will greatly appreciate your participation in the Council's work in:

- Helping us organize the Annual Picnic, YPSE-06 Conference, lecture programs, and activities connected with education
- Expanding our involvement in student chapters at universities and colleges. We have AIAA chapters at JHU, UMD, and USNA; a chapter at UMBC will be formed this fall. Note that even though neither JHU nor UMBC has an AA department, their engineering and science-math students take courses that prepare them for careers in the aerospace industry.
- Expanding programs for pre-college students. We play an active role in participating with organizations such as MESA (Mathematics, Engineering, Science Achievements) in organizing and judging contests.

In addition, we hope you will bring new ideas that help the aerospace community of today and tomorrow, and take leadership roles in promoting them.

We will greatly appreciate hearing from you. Please address your thoughts to Dr. Robin Vaughan, Secretary, AIAA Baltimore Section, [Robin.Vaughan@jhuapl.edu](mailto:Robin.Vaughan@jhuapl.edu), tel: 240-228-5006 (DC), or 443-778-5006 (Baltimore).

With regards,

**Pramud Rawat**

SNAME Chesapeake Section:  
[http://www.sname.org/hq\\_sections/chesapeake/](http://www.sname.org/hq_sections/chesapeake/)

Glenn L. Martin Maryland Aviation Museum  
<http://www.marylandaviationmuseum.org>

## >> From the Editor

### >> ASTRONAUT BOOK AWARDED! <<

A copy of the book "Sky Walking: An Astronaut's Memoir", autographed by author (and retired astronaut) Tom Jones, was won by **Juliet Page**, who entered the drawing after reading the Summer newsletter. Juliet works for Wyle Laboratories in Arlington, Virginia. She is an acoustics research engineer and team leader in the field of atmospheric sound propagation, specifically the development and experimental validation of simulation models for prediction of community noise, human audibility and sonic boom from a variety of fixed and rotary wing aircraft. Enjoy the book, Juliet!

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On another topic, all of the Officers and Council Members encourage you, as an AIAA member as well as a resident of the Baltimore region, to find ways to contribute to the education of our youth. One way is to make note of when your child or your county is having a **Science Fair**, and volunteer to be a judge. Many of us have done it, and not only is it not that difficult, but your experience in the aerospace community, in whatever capacity, will surely benefit that science fair. The Newsletter would also be happy to publish appropriate photographs or reviews of science fairs you may judge or attend. Help create excitement in the generations that follow!

## >> Upcoming Events

# YPSE - 06

## AIAA Region I Young Professional , Student and Education Conference

### 11/10 – 11/11/06 AIAA Region I YPSE-06 (Formerly Mid-Atlantic Technical Mini-Conference)

Last year's Conference was a success, and we to continue to grow this event, this year with close cooperation from many other Region I sections. It will provide a venue for undergrad and grad students to present papers (and win awards), and for young professionals to share their recent work. See <http://www.aiaa-baltimore.org/YPSE-06/>.

### 10/01/06 2006 Annual Aerospace Fair (Picnic)

Join us for another fun, family event! The fair will be held at the Visitors Center at Goddard Space Flight Center in Greenbelt, MD. Meet your colleagues and find new friends. Events include the Skylancer's show team, with tethered model airplanes, model rockets and open launches (weather permitting). See <http://www.aiaa-baltimore.org/>.

### 10/02/06 Glenn L. Martin Maryland Aviation Museum Speaker Series

**Richard Power** from Lockheed Martin Aeronautics will speak about U-2 advanced Concepts, Special Mission Programs, Lockheed Martin Aeronautics Company (tentative). See <http://www.marylandaviationmuseum.org/events/index.html>.

### 11/06/06 Glenn L. Martin Maryland Aviation Museum Speaker Series

**Brig. Gen. Guy Walsh**, Commanding officer of the 175<sup>th</sup> Wing at Martin State Airport, will provide a slide and video illustrated update on recent activities of the Maryland Air National Guard, such as the Wing's Lockheed Martin C-130 and Fairchild A-10 aircraft. See <http://www.marylandaviationmuseum.org/events/index.html>.

### 10/19/06 The Russian Space Program

Mr. Yevgeny Zvedre, Senior Counselor for Science and Technology at the Russian Embassy, will give an overview of Russia's current space projects, including its role in developing and building the International Space Station (ISS). Additionally, Mr. Michael O'Brien, NASA Assistant Administrator for External Relations, will speak on the current status and plans for joint U.S.-Russian space activities including the ISS. He will provide a broad view of all NASA's international relations. See <http://www.aiaa-baltimore.org/> and click on "Announcements" for more information.

<http://www.aiaa-baltimore.org/>



**11/10 – 11/11/06 Region I YPSE-06** (see above)

Make plans now to attend or present at this growing regional event.

**12/07/06 Naval Aviation**

Mark your calendar for this event to be held jointly with the Society of Naval Architects & Marine Engineers (SNAME). The topic will be *Use of UAVs in Naval Aviation*.

**7/06/07 – 7/08/07 Robert A. Heinlein Centennial**

The Robert A. Heinlein Centennial will take place in Kansas City, Missouri, in July 2007. The event's wide scope will include a special emphasis on the nascent but burgeoning commercial spaceflight industry, which so closely follows Heinlein's fictional history of space development. Participants include Dr. Michael Griffin (NASA Administrator), Dr. Peter Diamandis (first winner of the \$500,000 Heinlein Prize for Accomplishments in Commercial Space Activities), and Sir Arthur C. Clarke (in virtual attendance via satellite). To learn more, see <http://www.heinleincentennial.com>.

**>> Pre-College Activities: Thomas D. Milnes**

Precollege Chair Tom Milnes, a Member of the Maryland MESA (Mathematics, Engineering, Science, Achievement) Advisory Board, attended a meeting Dec. 14, 2005, hosted by Bowie State University President Dr. Calvin Lowe, at the Bowie State Library. Tom discussed the *Up, Up and Away* Aerospace Program for K-12 students with several MESA participants, and set up a number of Aerospace Workshop events. MESA (see <http://www.jhuapl.edu/mesa/content.htm>) is considering organizing as a not-for-profit foundation to increase fund raising capabilities. Tom also participated in the MESA Precollege Career Fair, held Feb. 17, 2006, at the Baltimore Convention Center in conjunction with the Black Engineer of the Year Awards Event. Tom made four separate 45-minute presentations to student groups on Aerospace Careers in the Baltimore-Washington Area.

The Section supported the Maryland Engineering Challenges Teacher's Workshop on January 12, 2006 helping several teachers new to the paper airplane and electric cargo challenges and passing out Educator Associate materials. A Paper Plane workshop for students and teachers at Hebbville Elementary School in Baltimore County was held on January 25 and at St. Bernadine's Elementary School in Baltimore City on February 7th. The Paper Airplane Challenge for Elementary School Students was held Saturday February 25, 2006 (during Engineer's Week) with 87 2nd to 5th Grade students participating and at least twice as many guests. Educational materials and posters from NASA were provided to students, teachers, advisors, and guests. Information on AIAA Precollege Programs were also made available.

**4/22/06 High School Electric Cargo Plane Challenge**

Teams of high school students competed at the Baltimore Museum of Industry to design and construct an electrically powered model aircraft, which performed tethered flights, with and without cargo. While the motor is supplied by AIAA, the students created an aerodynamically-shaped aircraft. (See <http://www.thebmi.org/library/CargoPlaneRules2006.pdf>) More information will follow in the near future.

**>> Recent Events:**

- Awards Dinner  
[http://www.aiaa-baltimore.org/newsletter/2006/Fall/Article\\_Awards\\_Ceremony\\_2006\\_a.pdf](http://www.aiaa-baltimore.org/newsletter/2006/Fall/Article_Awards_Ceremony_2006_a.pdf)
- Regional Leadership Conference 7-13/14-06  
[http://www.aiaa-baltimore.org/newsletter/2006/Fall/RLC\\_July12-13\\_06.pdf](http://www.aiaa-baltimore.org/newsletter/2006/Fall/RLC_July12-13_06.pdf)



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## >> Of Interest

- James Van Allen, space program pioneer, died Aug. 9, 2006. "James Van Allen was one of the greatest and most accomplished American space scientists of our time, and few researchers had such wide range of expertise in so many scientific disciplines," says NASA Administrator Michael Griffin. "NASA's path of space exploration is far more advanced today because of Dr. Van Allen's groundbreaking work." See <http://www.astronomy.com/asy/default.aspx?c=a&id=4452>



Photo by Tom Jorgensen

- Lockheed Martin surprises industry, wins *Orion* contract. <http://www.baltimoresun.com/news/nationworld/politics/wire/sns-ap-moon-rocket-contract.0,5368675.story>
- NASA awards \$500M seed money to Rocketplane-Kistler and Space X to develop vehicle to transport cargo and people to the ISS. See [http://www.newscientistspace.com/article.ns?id=dn9798&feedId=online-news\\_rss20](http://www.newscientistspace.com/article.ns?id=dn9798&feedId=online-news_rss20)
- The FAA granted provisional certification for the *Eclipse 500*. This VLJ (Very Light Jet) is a low-cost alternative to charter and private jets. Eclipse Aviation officials expect that these VLJs will be able to utilize more than 5,000 small airports across the country. See [http://www.eclipseaviation.com/index.php?option=com\\_newsroom&task=viewpr&id=1086&Itemid=348](http://www.eclipseaviation.com/index.php?option=com_newsroom&task=viewpr&id=1086&Itemid=348)

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