

# The Canaveral Flyer

May/June 2007

*A Newsletter of the Canaveral Section of ASME International*



## **Executive Committee**

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## **Greetings Canaveral Section Members,**

The month of April allowed members to see many senior design projects at Florida Tech. Canaveral Section members participated as judges in Mechanical and Ocean engineering projects and reviewed a host of other disciplines from Civil to Software engineering. The Canaveral Section presented an award for the most Humanitarian Design to the Super-Mileage Team. The super-Mileage team developed a composite three wheel vehicle utilizing carbon fiber to create a shell, light weight bicycle components, and a 3.5 horsepower motor to power their slender design.

This year was Florida Tech's second year for the Senior Design Showcase, which allows industry to review the student projects, offer advice, provide real world input, and judge the projects on concept, documentation, analysis, and presentation. This event provides the students with invaluable outside input on the implementation of their acquired knowledge. I encourage anyone interested in the projects to join the Canaveral Section next year as a judge or just to review the projects at your own leisure. We will post information about next year's event as the judging registration time approaches.

The end of June marks the end of our program year and opens a door of opportunity for those members who would like to join the Canaveral Section Executive Committee. It has been an honor for me to serve as your Canaveral Section Chair. I have enjoyed meeting many of you at the events throughout the year and working with the committee to coordinate these events. Executive Committee members are members that express an interest in helping coordinate events for the engineering community, helping engineering students network and grow, and those that want a say in what happens in their section. If you have a desire to serve on the Executive Committee to help decide what events the section chooses to hold, then send me an e-mail so that your name can be added to this year's ballot. The nominees that we have thus far for the 2007-2008 Executive Committee are presented on sheet 2.

Along with Executive Committee elections, we have some interesting events planned for the coming months including a Florida Tech fundraiser golf tournament on June 15<sup>th</sup>. View our events calendar on the following sheet for details and contact information. I look forward to seeing you at some of these events.

Best Regards,

J.D. VanGilder  
Canaveral Section Chair

### Schedule of Upcoming Section Events

Date	Event	Location	Event Type	RSVP Date	Event Coordinator/Contact
June 15th (Friday)	<b>Capstone Classic</b> <ul style="list-style-type: none"> <li>• 7 a.m. Registration begins</li> <li>• 7:30 a.m. Range opens</li> <li>• 8 a.m. Shotgun start</li> <li>• Noon Awards luncheon</li> <li>• All Day Putting contest</li> </ul>	Turtle Creek Golf Club. Rockledge	Golf Tournament / Florida Tech Fund Raiser	See Event Web page	<a href="http://coe.fit.edu/event/capstone.html">http://coe.fit.edu/event/capstone.html</a> (321) 674-6220 <a href="http://coe.fit.edu/event/documents/capstone.pdf">http://coe.fit.edu/event/documents/capstone.pdf</a>
July 14th (Saturday)	Confederate Air Force Museum and the Space Walk of Fame	Titusville	Tour/Speaker(s) (Family)	July 11th	Jack Wiles (321) 455-2893
August 17th (Friday)	Wyle Labs	?	Tour/Technical Presentation	August 14th	Tom Moriarty <a href="mailto:tjmpe@alidade-mer.co">tjmpe@alidade-mer.co</a> (321) 773-3356
September 15th (Saturday)	AF Cape Canaveral Air Station Lighthouse and/or the Museum	Titusville	Tour	September 7th	Jack Wiles (321) 455-2893
October 12th (Friday)	Val Jean	Indian Harbor Beach	Tour	October 10th	Tom Moriarty <a href="mailto:tjmpe@alidade-mer.com">tjmpe@alidade-mer.com</a> (321) 773-3356
November 9th (Friday)	Valve Company Tour	Melbourne	Tour	November 7th	Chris Epler <a href="mailto:EplerCE@usa-spaceops.com">EplerCE@usa-spaceops.com</a> (321) 867-9309



### Nominations for the Canaveral Section 2007-2008 Program Year Executive Committee



Position	Current	Nominee 1	Nominee 2	Your Vote
Chair	J.D. VanGilder	Concerned Member 1	Outgoing Member 1	?
Vice Chair	Ken Brace	Concerned Member 2	Outgoing Member 2	?
Treasurer	Will Judd	Concerned Member 3	Outgoing Member 3	?
Secretary	Hugh Bain	Concerned Member 4	Outgoing Member 4	?

If you or someone you know would like to be considered for one of these positions please feel free to contact me at your earliest convenience to have them added to the list. Note the name and position of the person being nominated; send your nomination and vote to [vangilderj2@asme.org](mailto:vangilderj2@asme.org) Of course, only the core committee positions are listed above there are many more supporting positions available if you are interested. Officers must be selected and submitted to ASME International by June 30<sup>th</sup>. Please don't hesitate to nominate and vote for a candidate of your choice.

## **ASME General**

### **ASME Professional Practice Curriculum**

The ASME Professional Practice Curriculum (PPC) is an online resource designed to help you advance in the engineering profession by providing guidance and resources on subjects that complement an engineer's technical skills. The PPC consists of 42 modules on topics ranging from product development and writing cost proposals to team building and negotiation. The PPC also provides information on alternative engineering career paths such as patent law, marketing and sales, and entrepreneurship.

ASME members have access to the following 4 modules ***free of charge*** at [www.professionalpractice.asme.org](http://www.professionalpractice.asme.org). You will need your ASME member number to access the module PDFs.

- Introduction to Intellectual Property (Business & Legal Series)
- Leadership Styles and Attributes (Management & Leadership Series)
- Effective Technical Presentations (Communications Series)
- Product Management (Product Management Series)

### **Canaveral Section ASME Sponsorship**

The Canaveral Section uses sponsorships to support section activities such as providing distinguished lecturers, professional development events, and monthly meeting costs, as well as student section scholarships, design competition sponsorships, and activities. The sponsorship notice will be supplied with each newsletter containing a sponsor's business and contact information on a standard business card size listing. The listing will run for a duration of one year for a donation of \$200. Please provide Company Name, Contact, Phone, Date, and Email information via email or mail to the following addresses. A business card or jpg image of your company logo will be needed.

ASME Canaveral Section P.O. Box 540171  
Merritt Island, FL 32954

***or***

J.D. Van Gilder at [vangilderj2@asme.org](mailto:vangilderj2@asme.org)

### **Editorial – An Article Worth Reading**

Ok, so I'm a few months behind on scanning ASME's Mechanical Engineering magazine for articles of interest, but *Very Light and Fast* (January 2007) by Alan S. Brown is a must for anyone who designs metal parts where strength and weight are important attributes. The article outlines the new designs and manufacturing techniques that are being employed by companies like Cessna, Eclipse, and Adam Aircraft to produce a new class of aircraft dubbed the very light jet, or VLJ. The strength-to-weight ratio for parts utilized in these designs need to be optimized for the aircraft to be competitive in the marketplace. Adam Aircraft addresses the issue by using composites to reduce overall weight and eliminate riveted assemblies. Cessna is still using aluminum, but has replaced rivets (which also create drag when protruding to the exterior) with high-performance adhesive bonding materials at metal joints. Eclipse is also using aluminum, however, they are using Friction Stir Welding to attach parts together. Invented in 1991 in Britain, Friction Stir Welding reduces rivet labor and weight, and the welding of dissimilar materials is possible. These techniques are certain to continue to gain acceptance in many applications, so learning the basics and keeping abreast of the developments are crucial to the success of our careers and our companies. The entire article is available at the following link:

<http://www.memagazine.org/jan07/features/verylight/verylight.html>

## Local News

### **Contract Awarded**

DRS Technologies has received a \$20 million contract from the Space and Airborne Systems division of the Raytheon to support the initial phase of the new Silent Knight Tactical Radar program. The program will support the rotary- and fixed-wing aircraft of the U.S. Special Operations Command, headquartered at MacDill Air Force Base in Tampa. The lead aircraft to receive this new radar will be the MH-47G Chinook. Eventually, it will be fielded on the MH-60M Black Hawk, MC-130H Combat Talon and CV22 Block 30 Osprey aircraft.

### **Space Station Module has New Name**

The International Space Station Node 2 module will also be known as "Harmony." The name was chosen from an academic competition involving more than 2,200 kindergarten through high school students from 32 states. The module was built for NASA in Italy. The Node 2 Challenge required students to learn about the space station, build a scale model and write an essay explaining their proposed name for the module that will serve as a central hub for science labs. Harmony will be launched later this year aboard the Space Shuttle Atlantis.

Thanks to our sponsors!



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