

The Canaveral Flyer

A Newsletter of the Canaveral of Section of ASME International

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PRAY FOR OUR MILITARY!

Message from the Chair...

I hope your holidays were bright and the start of your New Year has been all that you planned it would be.

I'm not sure who coined the phrase first that "the only constant we have in life is change", but it is something I'm sure that we all can relate to. With that in mind I want to take this time to tell you that Hugh Bain, our Executive Committee Chair and Army Reservist, was just called up to active duty. Hugh and his wife Keitha were looking forward to Hugh being able to finish his duties with the reserves within the next couple of months, but now they expect him to be gone for possibly up to one year. I ask all of us to keep Hugh, Keitha, and all the other members of our military in our thoughts and prayers as world events play out in the months to come. I also want to thank Hugh for his hard work and dedicated service he has given to our local society in the different roles he has served.

What does this mean for us back here at home? Well for one, I will be stepping forward to take the role as Executive Committee Chair for our section and Jim Phillips will assume the role of Vice Chair and help with setting up programs through August. Jim and I, along with the rest of the Executive Committee, are going to do all in our power to keep our section moving forward and continue to bring to our membership the quality programs, tours, and services you have grown accustomed to.

With that in mind, we are asking for your help to make our section even better. We have a tremendous base of diversity in mechanical engineering here in Brevard and Indian River counties that make up the boundaries of the Canaveral Section of ASME International. Our professional expertise's range from electronic packaging, structures design and analysis, mechanism designs, machine design, avionics, and yes we even have a few rocket scientists to name just a few! What can we learn from each other? What can we give to each other? What can we do to make your society even stronger? In the weeks to come a member of the executive committee will be contacting you via telephone asking for your feedback and inputs. We will make this as unobtrusive as possible and limit the call to few minutes during your day at your place of work. The Executive Committee wants to know what you would like to see for program topics, guest speakers, local tours, and social events that would make you want to come out and be a part of the life of our section. We want to raise the value you receive as being a member of our organization, to provide topics that are current and apply directly to making you more marketable as a mechanical engineer, and you to see a specific benefit to the cost of your time in getting involved. We also actively seek interested members who would like to get more involved in helping us to be more effective by working on teams in areas such as industry relations, membership, education, public relations, and marketing to have a more effective base organization.

The Canaveral Section of ASME is "our" organization. I am proud to be a member of it and want to work collectively with all the membership; current, future, and past if you have drifted away for one reason or another, to have an effective organization we can all feel ownership in. I look forward to meeting with, talking with, working with, and learning from each of you in "our" time to come.

Dan Johnson

Our November Distinguished Lecturer Presentation

The Distinguished Lecturer Program provides opportunities for ASME members and guests to meet and interact with outstanding engineering researchers and practitioners. Local presentations bring researchers at the leading edge of their technology into close contact with working engineers, scientists and students.

This description could not be more accurate as demonstrated by our first such meeting of this year. Dr. Mohamed Gad-el-Hak, currently of Virginia Commonwealth University in Richmond, brought us a very in depth discussion of his experience in the field of Micro-Electro-Mechanical Systems, or MEMS. Dr. Gad-el-Hak's work on Reynolds number effects in turbulent boundary layers, published in 1994, marked a significant paradigm shift in the subject. He holds two patents: one for a drag-reducing method for airplanes and underwater vehicles and the other for a lift-control device for delta wings. Dr. Gad-el-Hak has published over 380 articles, authored/edited 8 books and conference proceedings, and presented 210 invited lectures. Gad-el-Hak is the author of the book "Flow Control: Passive, Active, and Reactive Flow Management" and editor-in-chief of the "The MEMS Handbook." Professor Gad-el-Hak is a fellow of the American Academy of Mechanics, the American Physical Society, and the American Society of Mechanical Engineers.

Special thanks to Alan Zakaluk for setting up this fantastic presentation held at the Florida Tech Olin Engineering Center for our section and for also setting up the lunch time seminar for Harris GCSD in Palm Bay earlier that day. Great Job Alan!

Our December Local Technical Tour

If you were not among the 15 of us who attended the December tour of Demaco, Inc. in West Melbourne then you missed out on another good example of a high tech niche industry in our local community. Demaco designs and manufactures custom, industrial grade pasta machines for the food industry. They moved their corporate headquarters to the Space Coast from New York City in 2001. Thanks to LJ for giving us a very informative plant tour and for telling us a great deal about pasta manufacturing process.

A group of us continued the theme and met for dinner at Carrabba's Restaurant in Palm Bay after the tour to enjoy some pasta dishes.

Upcoming Events in February

We will be having a joint meeting this month with the Cape Canaveral Technical Societies (CCTS) Awards banquet held on the 21st, Friday evening at Ramada Inn in Satellite Beach. This will be a E-Week wrap up and give a chance to mingle with engineers of different backgrounds. The Canaveral Section of ASME will be awarding the J.Tal Webb Award to a local engineering leader who has been active in the aerospace industry for the last year. If you are interested in attending please contact Dan Johnson or Jim Phillips for details.

E-Week Volunteers Needed!

Stephanie Hopper is taking the lead again this year on our E-Week activity. We need speakers to volunteer a day to speak to local students about what it means to be an Engineer. I did it last year and it was a great experience! Please contact Stephanie at STHopper@xch-bsco-06.ksc.nasa.gov if you would like to pitch in.

What's happening with Fla Tech Student Section

Thanks to Steve Burton for coming out to speak to the student section about his experience in field engineering in working with the Navy for our November meeting. Steve told of different forensic type experiences he had encountered in determining how propellers had been broken, drive shafts bent due to misalignment, torpedo rooms being flooded, and how to get from one ship to another while out on the high seas. Steve brought a number of examples of what you can run into as a field engineer and how you need to exercise your diverse engineering experience to help solve real world problems, real time.

Our January meeting held on the 22nd was another good example of bringing working engineers to the students to help remove some of the mystery about what to expect once they get out of college. Alan Bertwistle of Desico, Inc. came in and spoke to the group of 20 plus students on the Pro's and Con's of owning your own business. Alan designs plant automation machines for the automotive, medical, and manufacturing industries. He told the group how he got started, how he grew his customer base, and what to look out for when it all comes down to you being the boss. Alan's sense of humor kept the students engaged in the presentation and made for a very open meeting where the students freely asked questions. Thanks again Alan for a terrific job! Also during this meeting we announced that the Canaveral Section will be giving out the Jack Wiles Scholarship to a deserving Fla Tech ASME Student Section member again this year. The applicant needs to fill out the application form, write a brief essay on their career goals, and get a letter of recommendation from the engineering faculty at the university. Last years recipient was Mehgan Rubio, this years student section chair.

Our February meeting will focus on Engineering Week activities with impromptu design competition and education about engineering in general.

If you have any questions for me on getting in contact with the Student Section, please do not hesitate to contact me at either my e-mail djohns08@harris.com or by phone at 729-3686.

Canaveral Section Recent History

Let us review some of the accomplishments of your Canaveral Section from the past few years....

- CCTS Technical Achievement Awards
- Jack Wiles College Scholarship Fund Commencement
- Most Improved Section in Region XI: Twice in the past 4 years
- Region XI Member Interests Award: Twice in the past 3 years
- Best Section in Region XI: 3 consecutive years
- Best Section in the ASME Organization: 3 consecutive years!

YOUR Canaveral Section has done the unheard of, the impossible, the unspeakable (gasp) ... earning the distinction as the BEST SECTION IN THE ORGANIZATION again.

Other section leaders look upon us with awe & amazement asking themselves, why can't we be like them? What makes that ASME Section different than all others? (Ho Ho Ho) The answer is simply put...

"The Best Mechanical Engineers in the World live right here in Brevard County."

Not only does our ASME Section win these awards but the local AIAA Section earns similar awards within their organization. Mechanical or Aeronautical Engineer, it does not make a difference... Hmmm... Aeronautical Engineers are Mechanical Engineers.

As your past Executive Chairman I could say sometimes I grew weary of receiving all the awards for the section. Complaining sometimes about not getting back to my chair before having to return to receive another section award. However I would not be truthful. I enjoyed the hell out of it, grew accustomed to it and was disappointed when we did not win... Does that mean that I was never disappointed?

We are just a great bunch of people helping our membership, FIT Student Section and the Brevard County Students. If you are looking for fun, come join us at our next meeting. Really... it is fun and interesting. We are not your typical Engineering Society. Let us show you!

Scott Seigel, C.E.M.

Let's not forget about Professional Development

The final planning is just about complete for the three professional development courses that our section will be offering this year. The classes start April 7-10 with "ASME B31.3 Process Piping", May 13 for "Design of Bolted Flange Joints", and finally "Cryogenics Fundamentals" being held in June.

What you will learn in the "ASME B31.3 Process Piping" classes during this intensive four-day course, through the use of hundreds of examples shown and personal experiences of the instructors demonstrates how the B31.3 Code has been correctly and incorrectly applied. This seminar explains the principal intentions of the Code and why the Code is not a handbook. Attendees come away from this seminar with a clear understanding of how piping systems fail and what the Code requires the designer, manufacturer, fabricator, supplier, erector, examiner, inspector and owner to do to prevent such failures. The focus of the seminar is to enhance participants' understanding and application of the B31.3 Code. Instruction is further enhanced by in-class problem solving, directly applying the rules and equations of the B31.3 Code for specific design and operating conditions to illustrate correct applications.

What you will learn in the "Design of Bolted Flange Joints" is that the design and analysis of flanged joints are essential components for pressure containment. The purpose of this course is to provide a fundamental understanding of the design and behavior of bolted flange joints. You will learn the latest developments from the Pressure Vessel Research Council research on gasketed flange joints, as well as the new design rules being developed for the ASME Codes.

The "Cryogenics Fundamentals" course reviews the development of the field of cryogenics along with a presentation of some of the present day low temperature applications. It will familiarize you with the behavior of common engineering materials as well as the behavior of commonly used cryogenic fluids. Illustrations of cryogenic liquefaction systems are featured as are, systems for the production of liquid hydrogen and liquid oxygen. This course will show how the components of air (and in particular, oxygen) may be separated to produce the almost pure liquids. In addition, some techniques which may be used to purify gases are presented. Learn how to use ASME Code design methods for cryogenic fluid storage vessels (dewars) and piping systems. Review the development of cryogenics, this course gives you in-depth coverage of cryogenics using real world applications.

Please see the Canaveral Section Web Page for further information on these courses including who should attend, any special requirements, course highlights, information about the instructors, CEUs and PDH's credits, cost, and reservation information.

Treasure Coast S.E.A.

The Treasure Coast Senior Engineering Association (TCSEA) is a group of mainly retired engineers living in the Vero Beach area who meet monthly. The TCSEA met on January 17 in Vero Beach for their first meeting of the year. They heard a lecture by George Beasley, a retired Air Force major and former chief engineer of ENSCO's International Seismic Arrays Installation. He spoke about the design, development and installation of seismic systems. He gave many interesting examples of the uses of ground penetrating radar such as in archeology, forensic investigations, coal- mine exploring grave mapping, land-mine and tunnel detecting. Twelve persons attended, with several from Brevard County.

The February meeting will be held in Vero Beach at The Council on Aging Conference Room, 688 14th St. at 10:00AM on February 21. The speaker will be Kelly Mather, a retired propulsion engineer, Life Member ASME and Board member of TCSEA. His presentation is titled "WHATEVER HAPPENED TO THE TURBINE-POWERED AUTOMOBILE?" He will speak about the early developments of the turbine-powered automobile and provide some first-hand experiences on the early problems encountered. He will also provide some insight on the future of this unusual automobile.

If you have any questions for these members please contact Maurice Hoyt at hoytmo@msn.com.

Preview of Coming Attractions

- ❖ March 12 Canaveral Section Awards Banquet at Quality Suites, Indialantic
- ❖ March 26 Canaveral & Fla Tech Student Sections Dinner Meeting & Senior Design Presentation
- ❖ April 7-10 PD Course: ASME B31.3 Process Piping
- ❖ April 22 DL Lecturer Series: Dr. Zweban speaking on Application of Advanced Composites in Mechanical Engineering at FSEC
- ❖ May 13 PD Course: Design of Bolted Flange Joints
- ❖ June PD Course: Cryogenics Fundamentals

Please see our web page for further information of these and other events coming up soon.

What's Coming up in Region XI

The Canaveral section is part of Region XI of ASME International which includes all of Florida, Alabama, and Mississippi along with portions of Georgia and Tennessee. The 25 sections and sub-sections work together in a variety of ways to enhance the organization an example of which is to bring distinguished lecturer series to our membership, regional or national guest speakers, and training opportunities.

- ❖ **February 1 Florida Section**
 - Training Class on "Florida Rules & Laws for Professional Engineers"
 - Held at Seimans Westinghouse Plant in Orlando
 - Contact Info: <http://www.asme.org/sections/florida>
- ❖ **February 11 West Palm Section**
 - Dinner Meeting with Guest Speaker Sue Skemp, President of ASME International
 - Held at The Waterford Hotel and Conference Center
 - Contact Info: Beatriz Suarez-Crosse 561-796-7974
- ❖ **April 4-6 Miami Section**
 - Regional Student Conference(RSC)/Regional Administrative Conference(RAC)/Regional Technical Conference(RTC)/Young Engineers Forum(YEF)
 - Held at Marriott Biscayne Bay Hotel and Marina
 - Contact Info: <http://www.asme.org/regions/sro/XISpring2003>

What's Coming up Outside Our Region

- ❖ March 3-6 McCormick Place, Chicago
 - ASME Technical Conference at National Manufacturing Week
 - For further Details: www.asme.org/nmw
- ❖ May 19-21 Hyatt Regency, Los Angeles
 - Third Annual MEMS Technology Seminar
 - For further Details: <http://www.asme.org/education/techsem/mems/exhibit.html>
- ❖ June 17-20 Camelback Inn Resort, Scottsdale, Arizona
 - 2003 Mechanics and Materials Conference
 - For further Details: <http://www.eas.asu.edu/~cpd/conference.html>

News from ASME International

Member-Get-A-Member Campaign Results

Your participation in the 2002-2003 Member-Get-A-Member Campaign has generated \$9,367 in scholarship dollars to support the education of ASME student Members. Since continuing this past June, you have introduced 193 new members to ASME International where they benefit from professional development, personal growth and member-only discounts as an ASME member. Last year, your support created 10 - \$1,500 in scholarships. Your continued support is important to its success and we appreciate your time and dedication. Personally inviting a friend or colleague is straightforward and simple. Remember, when you recruit a new member, 50% of the first years dues will be spent on scholarships for ME Students. Visit <http://www.asme.org/membershipdrive> for complete campaign details including a downloadable membership application, access to the online personalized email invitation – <http://secure.asme.org/mgam/invitationform.cfm> and recruiting tools.

Nominating Committee Officer Selections

The future success of the Society depends on the effective utilization of the knowledge and abilities of its individual members. If the Society is to improve or refine its present programs, it is essential that the members continue to select new officers who are capable, dedicated individuals with exceptional leadership qualities.

The 2003 Nominating Committee, consisting of 38 voting members, urges that you submit your proposals now. As part of its selection process, the Committee will study each of the written proposals submitted on behalf of all proposed nominees for office and will interview the proposed nominees and their supporters.

The Nominating Committee will select 13 nominees for Vice Presidential positions for the 2004-2007 term. There will be four Regional Vice President positions (III, V, X and XII); four Engineering Vice President positions (Basic Engineering, Communications, Energy Conversion, and Research); two Codes and Standards Vice President positions (Performance Test Codes and Standardization); and three other Vice President positions (Pre-College Education, Professional Practice, and Public Information).

The Nominating Committee will select three nominees for the member-at-large positions on the Board of Governors for the 2004-2007 term, and a nominee for President for the 2004-2005 term.

If, as a member of ASME, you are interested in submitting a proposal for any one of the above elective offices, please contact Judith Ann Bamberger, Secretary, 2003 Nominating Committee, at 509-375-3898, bambergerj@asme.org. The nomination package is available on ASME's web site <http://www.asme.org/honors> or copies may be obtained from Gilda A. DiTullio at ASME Headquarters at 212-591-7736, ditulliog@asme.org. The deadline for submitting completed proposal forms is April 15, 2003.

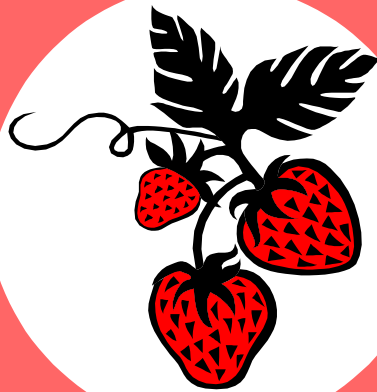
The Nominating Committee will be meeting during the Summer Annual Meeting in Atlanta, Georgia, June 15-18, to nominate individuals for ASME Society office. The names of the nominees will be on the officer election proxy that will be circulated to the membership in September 2003.

DATE: SATURDAY FEBRUARY 22

TIME: 6:00 PM

PLACE: 1032 JANS PLACE
SUNTREE CORAL SPRINGS SUBDIVISION

DEATH BY CHOCOLATE EXTRAVAGANZA



**Chocolate desserts will be provided
Surprise us by bringing
your favorite Chocolates**

ASME

A Renegade Production

RSVP to Scott & Lucille Seigel 757-0486

COST: \$10 PER PERSON (Helps to cover cost of purchased
Chocolates and wines)

EVENING ATTIRE SUGGESTED along with a Jacuzzi suit



**AMERICAN SOCIETY
OF MECHANICAL
ENGINEERS**

CCTS
P.O. Box 245
Cape Canaveral, FL 32920

