



# The Canaveral Flyer

*A Newsletter of the Canaveral Section of ASME International*

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**APRIL, 2004**

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*Message from the Chair...*

## Welcome Home Hugh Bain!

We are glad to welcome home our 2003 past chair Hugh Bain from his service for our country in Iraq. Hugh made it home in the middle of March after being called up to active duty in January 2003. Hugh started by going to Fort Gordon in Georgia for some additional training and then went to Jordan for a brief deployment. Hugh then moved on to Iraq and was stationed in and around Baghdad for nearly 8 months. Hugh and the other member of his division got to interact with the locals on a daily basis.

Hugh was welcomed home by his wife Keitha, and their baby daughter Kayla who was born last April. Hugh also got a welcoming home from his employer Rockwell Collins where ~300 of his colleagues got together for a reception in his honor.

Thank you Hugh for your sacrifice and again welcome home!

Dan Johnson

Web Page:  
<http://www.asme.org/sections/canaveral/index.html>

**CONTINUITY &  
CHANGE  
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### Preview of coming attractions:

Mark your Calendars - 2003 Canaveral Section Events					
Date	Event	Location	RSVP Date	Contact	Contact Info
June 5 2004	Bus Tour of KSC & AF Missile Museum	Cape Canaveral	ASAP	Jack Wiles	<a href="mailto:jwiles@webtv.net">jwiles@webtv.net</a>

Please see our web page at <http://www.asme.org/sections/canaveral/index.html> for further information of these and other events coming up soon.

## **Joint Dinner with Florida Tech Student Section another Great Success!**

Our Annual Joint meeting with the Florida Tech Student Section was held on Wednesday, April 7. We had about 50 people attend from Dean Bailey and his wife, Past Canaveral Section Chairs Tal Webb and Jack Wiles, faculty, students, and other Canaveral Section members. We also had the opportunity to officially welcome home Hugh Bain from his service to our country as a reservist in Iraq.

The three technical presentations this year included the formula car, a rocket, and a remote controlled vertical take off plane.

The formula car team presented the design and analysis of their vehicle using some of the high end tools available to the FIT students like Pro-Engineer and ANSYS. The structural frame design, transmission, steering, and safety all where every well done by the team.

SERRA was the name of the rocket project which consists of a 30 foot rocket that the student team is developing and will take to Wallops Island missile range to launch in May. The rocket will have real time video feed back using a n antenna system and will be able to track other flight activities during the mission.

VERTIGO was the name of the vertical take of and landing of a UAV type aircraft. The aircraft has about a 8 foot wingspan and has ability to take video of its mission as well and return it to the pilot after its batter powered ~45 minute flight.

Congratulations to all the student design teams on their hard work, very professional presentations, and as they move forward in the testing and demonstrations of their projects. The Mechanical Engineering department is alive and well at Florida Tech and we can be proud to be able to take a small part by being actively involved with the engineers of tomorrow here in our local community!

J.D. Van Gilder

## **Office Elections for the 2005 Program Year**

As the 2004 program Year comes to its close the 2005 program year is just around the corner and will be starting at the beginning of July This year your officers have been...

Chair Dan Johnson  
Vice Chair Stephanie Hopper  
Treasurer Ken Cook  
Secretary Will Judd

We want to thank everyone for their hard work to be able to make our past year a successful one.

The normal progression of things is for the Vice Chair to be nominated for the Chair the following year. Stephanie has declined the role of Chair but will remain active in her role working with minority and diversity as well as student outreach.

The nominations for officers for the 2005 program year are as follows:

Chair Dan Johnson  
Vice Chair Paul Burke  
Treasurer Ken Cook  
Secretary Will Judd

Your opportunity to vote for the officers as indicated or to write in other nominations can be sent to Scott Seigel at [sseigel2@cfl.rr.com](mailto:sseigel2@cfl.rr.com).

## June Event proving to be an Outstanding Opportunity

Local industry and points of interest tours have always been a great success for getting members to come out and take part and our upcoming tour on **Saturday, June 5** will prove to be another milestone for our section. Many thanks to **Jack Wiles** for taking the lead to set up a **50 person** bus tour of the Kennedy Space Center with stops at the Saturn-Apollo Center, Crawler, Air Force Missile Museum, Lunch at the Navy Greenhouse, and drive by of the Titan, Delta, Gemini, and Apollo launch pads. This event is open to our member and their immediate families at a minimal cost but *we need your assistance to help us plan the lunch menu.* Here are the options...

### Meal Type

Hot Dog & Hamburger  
Barbecue Chicken  
Seafood Buffet

Since we live here in the great USA we will go by majority rule on the lunch choice so when you RSVP please indicate your lunch preference and we will let you know via e-mail the final cost once we have everyone signed up. The section will help with the funding of this event so your cost will be one of the following based on the result of the lunch menu chosen.

<u>Meal Type</u>	<u>Total Cost per person for Student Members</u>	<u>Total Cost per person for Section Members and their family</u>	<u>Total Cost per person for Non-Section Members and their family</u>
Hot Dog & Hamburger	\$11.00	\$16.00	\$18.00
Barbecue Chicken	\$15.00	\$20.00	\$22.00
Seafood Buffet	\$18.00	\$23.00	\$25.00

We will meet at the Kennedy Space Center Visitor Center at 9:30 am so we can start our bus tour promptly at 10:00 am. We will stop for lunch around 12:00 and conclude our tour by 3:00. This 4 to 5 hour event will be a great opportunity to experience first hand where major events in our history took place right here in our own backyard. Don't miss out on this great opportunity.

This will be a limited participation event due to the size of the bus and the logistics involved so it will be first come first serve to the first 50 people to sign up via e-mail with Jack Wiles so don't delay and miss your opportunity. Sign up today and we look forward to seeing you at this event!

Dan Johnson

## What's happening at Florida Tech

We are at the end of our Program Year at Florida Tech and are getting ready for final exams. We will be planning our events for our new program year starting next September and will get the word out for the type of events and meetings you can expect.

To get in contact with the Florida Tech Student Section please do not hesitate to contact Student Section Advisor **JD Van Gilder** at [jvangild@harris.com](mailto:jvangild@harris.com)

## Treasure Coast SEA

Meetings are held on the third Friday of the month and meeting announcements will be sent via e-mail and the Vero Beach Press Journal prior to each meeting. If you would prefer to be reminded by any other method (phone, mail, etc.), please contact **Kelly Mather**.

# Thumbnail Bio

This issue's thumbnail biography is about our Fellow Member Bob Bosnak, P.E., Fellow Member. His career spans a period of over forty years devoted to public health and safety in the service of the Federal Government through the development of engineering requirements for the safe construction and operation of federally regulated nuclear power plants and federally regulated commercial shipping.

As a Commissioned Coast Guard Officer for over twenty-four years, Bob's assignments were principally in programs associated with the Coast Guard's regulatory responsibilities for the safety of U.S. ports and waterways, the safety of commercial shipping and that of recreational boating, and the protection of the marine environment. Bob's responsibilities included ship design technical review, shipyard construction, personnel competence, and ship and port operational safety. Ship types covered ranged from recreational boat and traditional passenger, cargo and tank vessels to liquefied natural gas carriers and the nuclear ship Savannah.

After his retirement from the Coast Guard in 1972 with the rank of Captain, Bob joined the Atomic Energy Commission's, (AEC), regulatory program as a mechanical engineering reviewer of nuclear plants components and systems. After Congress established the U.S. Nuclear Regulatory Commission, (NRC), from the regulatory programs of the AEC, Bob became the Mechanical Engineering Branch Chief of the NRC's Office of Nuclear Reactor Regulation responsible for the safe construction and operation of the mechanical components of nuclear power plant systems.

In 1987, Bob assumed duties in NRC's Office of Nuclear Regulatory Research. He held management responsibilities for an annual \$35-40 million research program to assure the continued safety of operating plants, the decommissioning of those plants at the end of their useful lives, and the safe and environmentally sound disposal of low-level and high-level radioactive waste.

Throughout his federal professional career in the U.S. Coast Guard, U.S. Atomic Energy Commission, and U.S. Nuclear Regulatory Commission, Bob has pursued his strong conviction that government must be an active participant in the standards development activity of voluntary standards organizations, such as that of ASME. By presenting the engineering and socio-political concerns of the public sector so that codes, standards, and related accreditation programs developed with consensus procedures will be used in federal regulatory and procurement programs, in lieu of unilaterally developed government programs.

Some of Bob's awards include: Elected member of Tau Beta Pi and Associate Member of Sigma -Xi at MIT; election to ASME Fellow Grade; the Secretary of Transportation's Achievement Award for modernizing Coast Guard Marine Engineering Regulations and pioneering Federal use of National Consensus Standards; ASME's B.F. Langer Nuclear Codes & Standards Award; the National Society of Professional Engineers' Federal Engineer of the Year Award - NRC - 1990; and the Coast Guard's Commendation Award for establishing a program for the safe importation of LNG in bulk by ships.

Bob's higher education history is:

U.S. Coast Guard Academy 1948

BS Eng'ineering MIT 1960

MS Naval Arch. & Marine Engineering

P.E. Degree - Naval Engineering

# Student Activity Calendar

See the attached links for upcoming information and upcoming deadlines for ASME Student member activities. ASME offers a lot for our student members, don't miss out on your opportunity. Check it out today!

*(See our website for links if you have the paper newsletter.)*

## May

May 1 Deadline for Pre-College Mini-Grant Applications

May 16 Student Manufacturing Design Competition – project description due

May 30 Young Design Engineers' Paper Competition – entry deadline

## June

June 1 Letter of intent for Hydro Power Contest

June 1 Petroleum Division Student Scholarship Program

June 30 Solid Waste Processing Division – Scholarships for graduate and undergraduate study – application due

June 30 Student Section officer listing due

June 30 Student Section financial report due

## July

July 2 2004 ASME Student Mechanism Design Competition – Project report due

July 25 NDE final manuscript due

July 29-8/1 Human Powered Submarine Contest

*(See our website for links if you have the paper newsletter.)*

## Second Edition Of Gas Turbine Performance Now Available

ASME has announced the release of the second edition of Gas Turbine Performance, a book for engineers on how to achieve optimum fuel efficiency, stability and emission control in aircraft, marine, and other types of gas turbine systems.

For more information, or to purchase Gas Turbine Performance, contact ASME by calling (800) 843-2763 or [infocentral@asme.org](mailto:infocentral@asme.org). Refer to order No. 802116.

## **Engineers without Borders USA!**

ASME and Engineers without Borders are teaming up to engineer a better world – and you student section can help.

ASME is now forming teams of engineering students (junior or senior standing minimum), professional engineers, and engineering faculty to be an integral part of the projects. Multidisciplinary teaming is encouraged.

To participate you must:

- 1) Form an ASME team and enlist your Faculty Advisor to participate with you.
- 2) Apply for a project from the list of approved projects, or write your own project. (Guidelines and projects are available on the web. Project approval takes at least 4 weeks). Application deadlines are Aug. 1 (for 2004-early 2005) & Dec. 1 (for projects considered during 2005).
- 3) Use only appropriate and sustainable technology.
- 4) Commit 6-12 months to finish and install the project.
- 5) Supply your own travel funds, and arrange funding of materials.

Engineers Without Borders (EWB) envisions a world in which all people have access to adequate sanitation, safe drinking water, and the resources to meet their other self-identified engineering and economic development needs.

To learn more about Engineers Without Border-USA, including guidelines and projects under current consideration, visit <http://www.ewb-usa.org/index.htm>

To participate through ASME, visit [www.asme.org/students/ewb](http://www.asme.org/students/ewb).

## **ASME Offers MIT Summer Programs For Engineers**

ASME has teamed up with the Massachusetts Institute of Technology in providing summer engineering programs offered by the MIT Professional Institute.

The program will give participants access to some of the leading experts in a variety of engineering fields.

These one-week certificate courses will be held on the MIT campus. Among them are: Biotechnical/ Pharmaceutical, Computer Engineering, Energy/Environment, Manufacturing & Automotive, Physics, Optics and Astronomy, Systems Design, Data & Models, Transportation, and Organizations, Policy and Economy.

As a special offer to ASME members, MIT is offering a 10 percent discount off the retail price of the programs. For more information contact ASME at 1-800-843-2763 or register online at <https://secure.asme.org/VirtualCampus/MIT2.cfm>

## Brain Teaser

Well this last month I tried to make the brain teaser question a little tougher but still managed to get 5 people who came up with the right answer. Congratulations to **Allan Torsney** and **David Wadzinski** for getting it correct! Here is the solution to last months question if you missed it.

### Solution:

#### Case (a): Bird flies at a speed greater than that of the train

The train (at a speed of 60 miles per hour) travels 60 miles in 60 minutes.

Therefore, the train travels from Atena to Barcena (84 miles) in 84 minutes.

Importantly, the bird makes the journeys continuously back and forth for this same amount of time (namely, 84 minutes).

Thus, the total distance traveled by the bird

= 80 miles per hour x 84 minutes =  $80 \times 84 / 60$  miles = **112 miles**.

#### Case (b): Bird flies at a speed less than that of the train

In 36 minutes, the bird travels 36 miles, the train travels 48 miles, and the two meet.

Now, the train (which is traveling at a speed greater than that of the bird) will reach Barcena before the bird.

So, the bird simply returns to Barcena (a return journey of 36 miles).

Thus, the total distance traveled by the bird is **72 miles**.

Take a look at the question below and give it a shot. Submit your answer to Dan Johnson at [dan.johnson@harris.com](mailto:dan.johnson@harris.com) and he will let you know how you did. We will announce our winner of the Brain Teaser for this program year next month and will be giving a gift certificate out to the person who has received the most points for correct answers.

It was vacation time, and so I decided to visit my cousin's home. What a grand time we had! In the mornings, we both would go for a jog. The evenings were spent on the tennis court. Tiring as these activities were, we could manage only one per day, i.e., either we went for a jog or played tennis each day. There were days when we felt lazy and stayed home all day long.

Now, there were 18 mornings when we did nothing, 15 evenings when we stayed at home, and a total of 17 days when we jogged or played tennis.

For how many days did I stay at my cousin's place?

Good luck!

## Links to Useful Websites

### Southern Field Office

<http://www.asme.org/regions/sro/>

### Region XI Home Page

<http://www.asme-xi.org/>

### ASME International Home Page

<http://www.asme.org/>

### Canaveral Council of Technical Societies (CCTS)

<http://www.canaveralcts.org/>



# **AMERICAN SOCIETY OF MECHANICAL ENGINEERS**

CCTS  
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