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Executive Committee
Vice-Chair
Paul Burke

Treasurer
Ken Cook

Secretary
Will Judd

FIT Student Advisor
John Van Gilder

FIT Student Section Chair

Industry Relations
Scott Seigel

Membership Development
Leanna Konowicz

Member Interests
~ Open Position ~

Minorities & Women
Stephanie Hopper

Newsletter Editor
~ Open Position ~

Professional Development
Scott Seigel

FSEC Representative
& WEB Masters
Dave Chasar, Will Judd, &
Hugh Bain

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

**continuity
& change
visit asme.org**

Message from the Chair...

Brevard Zoo "Wild Side" Tour Roaring Success

Our start to the 2005 Program Year was a great success. We had thirteen show up for the admission to the Zoo and we were able to get eleven of us on the Africa Behind the Scenes Tour. We got to see the new facility where local children come for "Zoo School" to find out more about animals, the environment, and how we should interact with both. Then we got up close and personal with a pair of llamas (luckily no one got spit on!). We found out about the on site veterinary hospital where the sick or injured animals are attended too and where the animals on transfer from other zoos go for a 30 day quarantine before being mixed in with the other animals at the zoo. Then the real fun started when we made our way into deepest, darkest Africa where we got to touch and brush the white rhino whose skin has an interesting texture. We finished things up by feeding the Giraffes that are resident at the Zoo. Fun was had by all and I highly recommend going on this tour for yourself if you were not able to make it out with us for this past ASME outing.

Our events coming up in September and October promise to be very exciting! September has us starting off leaning if you have what it takes to go off and start your own engineering company. Next, you get to go on a tour of a nationally historical monument that we have right here in our own backyard in Brevard County. To wrap things up in October, an ASME Distinguished Lecturer will be speaking on the cutting edge of virtual product development in the automotive industry. Quite a variety, quite an opportunity, and hopefully it will peak your interest and get you out at one or all of these upcoming events!

There is an updated 2004-2005 Program Schedule giving you an idea on where we stand on the other upcoming events as we move further into our Program Year. Variety is what you will see this year and we hope it will draw you out to the meetings and tours to meet and interact with your colleagues in the area and hopefully get to find out something new or more on a topic that you are somewhat familiar with.

As always, please see our web page at <http://sections.asme.org/canaveral/> for further information of these and other events coming up soon.

**DO YOU
FEEL LIKE
A FISH
OUT OF
WATER...
when it
comes to
your
career?**

Join our
EMentoring
Community



Sign-up for a Mentor
TODAY!

www.asme.org/ementoring

eMentoring

Canaveral Sections wins Best Section for Fifth Year!

The Region XI Professional Leadership Seminar (PLS) in Huntsville the weekend of August 22nd only proved that there is no close second to your Canaveral Section. So frustrated are the other sections by their membership apathy that all the data for the Section Awards were conveniently lost a couple of weeks ago. The Awards Committee Chairman thanked us for returning the **Best Section Plaque** which we have owned the past 4 years but was in hiding due to past Chairman Hugh Bain being in Iraq. Due to the "records" being missing no section awards were given except for member retention as those records are kept by NY. Your Canaveral Section came in a close second to the award chairman's section.

Being that no Best Section Award was awarded this year we still retain our status as the heavy weight champion of Region XI by default! The others just didn't bother showing up at the tournament.

Past Chairman Hugh Bain sudden deployment to Iraq left us with a problem a couple of years ago. Upon his deployment to Iraq no one could find the Region XI Best Section Plaque. His garage was searched thoroughly as well as the remainder of his home but no luck. Section Leadership, somewhat embarrassed decided that we would just have to keep winning the Best Section Award so that we would never be asked for the plaque again. The U.S. Army taught Camouflage techniques worked well. Yet upon Hugh's return the plaque reappeared! I wonder if that bruise on Saddam's head was from a certain piece of wood.

One of the highlights this past August at the Region XI PLS were the 2.5 hours of Industry Relations training provided by our very own Scott Seigel. Our Canaveral Section lessons learned are passed along to the other section as well as up to date marketing techniques and Industry Relations information relevant to each section's area. Scott earned top marks for his home grown power point presentations which are passed along to other Regions at the SAM and Winter Annual Meetings.

Scott Seigel

September 2004 – Me, run my own business? Why Not?

Here is your chance to find out if you have what it takes to make that next step in your career and become the next Bill Gates. Join us as we present Daniel T. Koenig who will be speaking on "The Engineer Entrepreneur" at Florida Solar Energy Center in Cocoa on Wednesday, September 22.

The Engineer Entrepreneur delivers tutorials on key subjects that are not part of the engineering curriculum, including project management, team skills, communications, product development, financial management, e-commerce techniques, business-plan development, and the elements of world-class performance.

It defines the traits and prerequisites for success, illustrating theory with pragmatic, how-to scenarios. It provides many checklist summaries to guide successful startups and to promote continued growth of businesses based on technology.

While addressing potential and current entrepreneurs, the presentation provides all engineers with a thought-provoking perspective that increases their value in business settings.

We will be meeting at Florida Solar Energy Center in Cocoa on Wednesday, September 22 at 6:30pm for barbecue, followed by Mr. Koenig's presentation at 7:15pm. Cost will be \$10 for members and \$5 for students to cover the cost of dinner. Mark your calendar and sign up today by referring to the attached flyer for further information and how to RSVP.

Dan Johnson

October 2004 - Air Force Missile Museum Bus Tour!

Our second tour of the program year will be a bus and walking tour of the Air Force Station Space and Missile Museum on Saturday, October 9.

This tour is open to US Citizens as well as Foreign Nationals and is open to family. Air Force Security has requested that we provide the following information for those of who will be going on the tour.

For Foreign Nationals we need your Full name, Nationality, Date of Birth, Passport Number, Passport Expiration Date, and Employer. For US Citizens we need your Full Name, Date of Birth, and Employer.

The chartered bus has air conditioning and lavatory facilities on board for the 54 of us that will be able to go. We expect it to fill up quick so don't delay, sign up today. See the attached flyer for more information about the tour and again for RSVP information.

Special Thanks to **Jack Wiles** for leading the charge on this project and getting everything organized!

Dan Johnson

October 2004 – First Distinguished Lecturer of the Program Year!

October 20 will be our first ASME Distinguished Lecturer of the season, and we are proud to be able to bring in to talk to our section Dr. Steven Rhode, an ASME Distinguished Lecturer, who will be speaking about Virtual Product Development from an Automotive Perspective. Have you an interest in virtual product development and the design tools used to create them? The multimedia lecture traces the evolution of math based design and engineering in the automotive industry, and the benefits of that approach.

Today the digital computer is being used extensively to design and engineer automotive vehicles. In addition, onboard computers and electronics are playing an ever increasing role. Both of these applications of digital technology are providing consumers with higher quality products in less time and at lower cost.

This multimedia lecture by Steve Rohde traces the evolution of math-based design and engineering in the automotive industry, and the benefits of that approach. Beginning with the "old days" in which road testing was the primary way to develop automotive vehicles, the lecture describes the movement to laboratory testing, and then to the "virtual" world.

The concepts of virtual product development and math-based synthesis are introduced. These concepts, together with a systems engineering based Vehicle Development Process (VDP), enable the strategic application of math-based technology to all facets of the vehicle creation process. This includes the use of mathematical models to: optimally position products in the marketplace; style vehicles; translate the customers' voice into product functional characteristics; and synthesize robust physical realizations, i.e., vehicle designs to meet both the physical and functional requirements, as well as producibility requirements. Virtual product development is enabled by the use of a multitude of different types of mathematical models and computer-based methods at different levels of detail. The logical integration of these models into the VDP yields the "Virtual Vehicle" concept. More specifically, the virtual vehicle is defined, and examples of its use and associated benefits throughout the VDP are shown.

Besides resulting in shorter product development cycles at reduced cost, fewer prototype hardware builds, and improved product quality for the customer, the "virtual" approach presented enhances innovation markedly. Challenges associated with the implementation of a math-based approach, the use of novel math-based technology including advanced signal processing techniques, and the synergism with hardware testing will also be discussed.

This event too will be at Florida Solar Energy Center and for more information see the attached flyer for additional program information and how to RSVP.

For more information on Dr. Rhode, and other distinguished lecturers, please visit the www.asme.org and visit the distinguished lecturer Program (DLP) section.

Dan Johnson

What's happening at Florida Tech

Tours, meetings, impromptu design competitions, and joint gatherings with the Canaveral Section are held throughout the regular Fall and Spring semesters. 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.

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** at mather@iu.net.

ASME International Mechanical Engineering Congress

The design engineering program for the 2004 ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS is now available.

For a complete preview of technical sessions focusing on design engineering, go to <http://www.asme.org/congress> and click on "Program Overview", then choose "Design Engineering" from the list of topics.

In each session listing, you will find the title, participants with their affiliations, papers titles, and abstracts.

In addition to featuring peer-reviewed research, an array of special events, panel discussions, and networking opportunities, the ASME Congress also features a curriculum of short courses. For full details, visit...

<http://www.asmeconferences.org/Congress04/SeminarCourses.cfm>

Co-located with Congress, the Research, Development and Design Expo (RD&D) is the only event dedicated to new discovery, showcasing the latest developments and tools in the world of engineering.

For the latest information on this event...

visit <http://www.rdexpo.com>.

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visit <http://www.rdexpo.com>.

ASME Communities of Practice

Have you signed up for the ASME Communities of Practice (COP) Website yet? As of August 10th, over 1561 ASME members have and it was only launched at the beginning of July. Wow!

The COP Website is a networking site in which members with similar interests can share ideas, interests, and techniques. We've been using it for the ECC to stay connected to other YE's.

Once signed up for the main COP site, you can start to look for communities you may be interested in keeping up with. Prior to joining any one community, you can view the threads and see if the discussion posted by that community jives with you (you can always initiate a discussion - once you join).

Once you join a community, you will be able to send messages, start and provide input to ongoing discussions, check out links users have posted. This is one of the best networking ideas that ASME has come up with. The best part is, you get an inbox (separate from your regular e-mail and is not accessible to external companies/solicitors). You can check the site and your inbox at your convenience or receive notifications of new messages or community postings. When you log in, you will clearly see any new messages/discussions that have been posted your last log on.

It takes less than 5 minutes to set up a user name and then find a group or groups that you like. You can leave any community whenever you like.

Below are only some of the communities that you can be a part of.

- Engineering Public Policy, Young Engineer Correspondents, Inservice Testing in Nuclear Energy, Intellectual Property, Fire Protection, Process Engineering for the Food Industry, Sustainable Engineering, Workplace Trends, Ethics and Licensing, Finite Element Analysis, Inservice Testing in Nuclear Energy, Logistics, CFD, Nano Materials Engineering and Safety, and Impact Engineering

Check it out at cop.asme.org.

Faye Tomimbang

New mortgage benefit for ASME Members!

Wachovia makes the mortgage process easy by providing competitive rates, quick approvals, and accurate closings. Members also receive friendly, personal attention through an ASME-dedicated mortgage team.

For details, visit

<http://www.wachovia.com/misc/0,,507,00.html>

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/>

Cryogenics Professional Development Course

Short Course Number: PD049

Short Course Title: Cryogenic Fundamentals

Short Course Date: 10/18/2004 - 10/21/2004

Short Course Location: Cocoa Beach FL

Description:

This 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.

Special Feature You will receive a copy of the textbook Cryogenic Systems, 2nd Ed., by Randall F. Barron. and comprehensive notes based on course content.

Who Should Attend Mechanical and Chemical Engineers, who wish to receive an up-to-date overview of the various areas in cryogenic engineering.

Short Course Outline: Ø Material Properties At Cryogenic Temperatures The behavior of common engineering materials at low temperatures. Selection of proper material for various cryogenic uses Fluid Properties and Behavior of commonly-used cryogenic fluids. Ø Gas Liquefaction Systems Cryogenic liquids production characteristics of various liquefaction systems including systems for the production of liquid hydrogen and liquid oxygen. Ø Separation And Purification Systems An examination of how the components of air (and in particular, oxygen) may be separated to produce the almost pure liquids. In addition, techniques used to purify gases are presented. Techniques for the separation of hydrogen are discussed. Ø Cryogenic Refrigeration Systems A review of the various refrigerators used to maintain low temperatures. some refrigerators used in very low temperature applications, such as cooling in particle accelerators, etc. are also presented. Ø Measurement Systems For Low Temperatures Techniques used to make measurements at low temperatures, including the measurement of temperature, mass flow rate, and liquid level in containers. Ø Cryogenic Fluid Storage And Transport Systems Design methods used in ASME Code design of cryogenic fluid storage vessels (dewars) and cryogenic piping systems. Special problems, such as two-phase flow and transfer line cool down will be examined. Ø Vacuum Technology Examination of the systems used to produce the vacuums used in cryogenic systems. The design techniques for vacuum systems will be illustrated.

Early Bird Member Price: \$1,745.00

Early Bird Non-Member Price: \$1,845.00

Payment Due Date for Early Bird Discount: 09/15/04

Member Price: \$1,895.00

Non-Member Price: \$1,995.00

Number of days: 4

CEU's: 3.00

PDH's: 30

About the Instructors: Randall F. Barron is Professor Emeritus, Mechanical Engineering at Louisiana Tech University. Dr. Barron teaches at the undergraduate and graduate levels in the areas of Thermodynamics, Heat Transfer, Cryogenics, Solar Energy, Acoustics and Heat Exchanger Design. He has also conducted research in the areas of Cryogenics, Heat Transfer and Materials.

For further information, please contact Scott Seigel by e-mail at sseigel2@cfl.rr.com

Brain Teaser

We are continuing to bring you the highly regarded Brain Teaser again this program year. Each month a math or science type problem will be presented and you can respond by e-mail with your solution. For those of you who get the correct answer you will go into the running to get a gift certificate to a local restaurant at the end of our Program Year. The person with the most correct answers wins. Let the games begin!

We were going by train from Anglechester to Clinkerton, and an hour after starting an accident happened to the engine.

We had to continue the journey at three-fifths of the former speed. It made us two hours late at Clinkerton, and the driver said that if only the accident had happened fifty miles farther on the train would have arrived forty minutes sooner. Can you tell from that statement just how far it is from Anglechester to Clinkerton?

Good Luck! Send your response to Dan Johnson at djohns08@harris.com.

New Faces of Engineering Strives to Recognize Young Talent

The ***New Faces of Engineering*** strives to promote the accomplishments of young engineers by highlighting their engineering contributions and the resulting impact on society. The campaign is designed to enhance and improve the image of engineering by:

Putting faces to what has often been referred to as “the stealth profession.”

Showing a group of young, diverse and talented engineers, thereby portraying engineering as an exciting profession open to everyone.

Providing both stimulation and incentive for college engineering students to explore the variety of career options available to them with their engineering degrees as well as encouraging high school students to study engineering in college.

Help students understand they are part of a global profession.

This is an opportunity to represent the mechanical engineering profession and ASME as the top individual *New Faces*. The ASME finalist will be featured in a full-page ad in USA TODAY during Engineers Week, February 20-26, 2005. The finalist's photo will be captioned with the engineer's name and ASME affiliation, employer and a brief statement of that individual's accomplishments as they relate to the public welfare.

New Faces provides a unique opportunity to learn from new engineers. E Week and the ASME staff will interview the top individuals regarding the experiences leading them to select engineering careers, the challenges in making the transition to the work force, and other key experiences that can be used with K-12 and college students.

The top candidates will participate in an e-mail and/or online Question and Answer discussion forum with engineering undergraduates globally at a future date to be determined. Candidates are asked to list languages in which they are fluent.

National Engineers Week will profile the top individuals. The profiles will be posted on the ASME web site, , National Engineers Week web site at www.eweek.org and at www.discoverengineering.org, the EWeek web site for middle school students.

The engineering trade press will be targeted for feature stories on the top individuals. The local media of all the nominees will be targeted to capture general press coverage.

Visit http://www.asme.org/eng_week/ to submit your application by the Oct. 22, 2004 deadline.



AMERICAN SOCIETY OF MECHANICAL ENGINEERS

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



Canaveral ASME Program Year 2005 Calendar

<u>July</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>
No Event Planned	<i>Tour: Brevard Zoo "Wild Side" Outing</i> Date: Aug 15 Location: Viera POC: Leanna Konowicz (KONOWILC@usa-spaceops.com)	Speaker: Dan Koenig on Engineer Entrepreneur Date: Sep 22 Location: FSEC POC: Dan Johnson (djohns08@harris.com)	<i>Tour: AF Missile Museum</i> Date: Oct 9 Location: Cape Canaveral POC: Jack Wiles (jwiles@webtv.net)

DL Speaker: Dr. Rhode on Virtual Product Development

 Date: Oct 20
 Location: FSEC
 POC: Alan Zakaluk
 (azakaluk@harris.com)

<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>
Speaker: TBD Date: TBD Location: TBD POC: TBD	<i>Tour: Ice Skating Rink (Joint event with FIT Student Section)</i> Date: Dec 11 Location: Rockledge POC: JD Van Gilder (jvangild@harris.com)	Award's Banquet; Speaker: TBD Date: Jan 12 Location: Hotel in Cocoa Beach POC: TBD	CCTS E-Week Banquet with DL Speaker (Joint Effort w/ Florida Section) Date: Feb 18 Location: Hotel in Cocoa Beach POC: Alan Zakaluk (azakaluk@harris.com)

ASME Industry Event at Sun-tree CC w/ Guest Speaker Burt Dicht (??)
 Date: TBD
 Location: North Melbourne
 POC: Paul Burke & Scott Seigel

Tour: Mather's Bridge

 Date: Jan 22
 Location: Indian Harbor Beach

 POC: Will Judd
 (WEJudd@xch-bsco-06.ksc.nasa.gov)

E-Week Speakers

 Date: Feb 21-25
 Location: Brevard County Schools
 POC: Stephanie Hopper
 (STHopper@xch-bsco-06.ksc.nasa.gov)

<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>
FIT Student Section Dinner & Design Presentation Date: Mar 30 Location: Melbourne POC: JD Van Gilder (jvangild@harris.com)	<i>Tour: NSLD</i> Date: TBD Location: Cape Canaveral POC: Stephanie Hopper (STHopper@xch-bsco-06.ksc.nasa.gov)	DL Speaker (Joint Effort with Florida West Coast Section) Date: TBD Location: TBD POC: Alan Zakaluk (azakaluk@harris.com)	Speaker/Tour: TBD Date: Jun TBD Location: TBD POC: TBD

Mini-Topic Evening: Hugh Bain's experience in Iraq, Ken Cook's experience in China, & TBD

 Date: TBD
 Location: TBD
 POC: TBD

Legend:
Indicates Status Confirmed



Wednesday, September 22, 2004

Time: 6:30/7:15 PM (Food/Presentation)

**Location: Florida Solar Energy Center
1679 Clearlake Road, Cocoa FL**

Daniel T. Koenig:

“The Engineer Entrepreneur”

Ever thought about starting your own business in engineering? Well here is a chance to find out if you have what it takes to make that next step in your career and become the next Bill Gates. This practical guide explains how to use your engineering know-how to satisfy customer needs.

Providing entrepreneurs with a road map to success. This presentation will assist you in...

- **Evaluating your skills**
- **Deciding whether to take the plunge**
- **Launching your own small business**
- **Bringing a new product or service to market**
- **Creating a sustainable company**

Get Tutorials on subjects that are not part of the engineering curriculum, including project management, team skills, communications, product development, financial management, e-commerce techniques, business-plan development, and the elements of world-class performance.

Cost – Lecture: Free;

Barbecue Dinner: \$10.00/\$5.00 Students

RSVP by: Monday – Sept 20, 2004

RSVP to: Dan Johnson - djohns08@harris.com

or by phone at 321-729-3686.



Saturday, October 9, 2004

Time: 8:30am - 2:00pm

**Location: Pass & ID Office Parking Lot,
Canaveral Air Station, Canaveral, FL**

Canaveral Air Station Missile Museum Tour

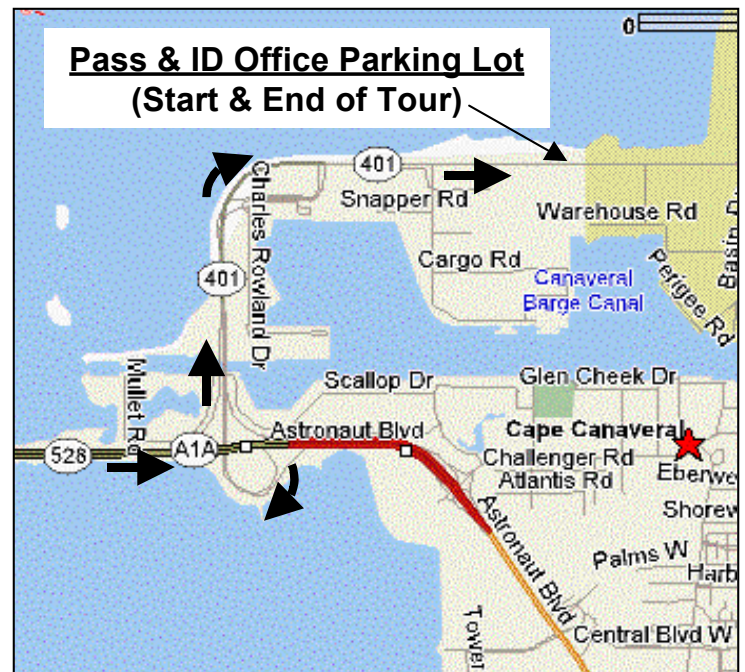
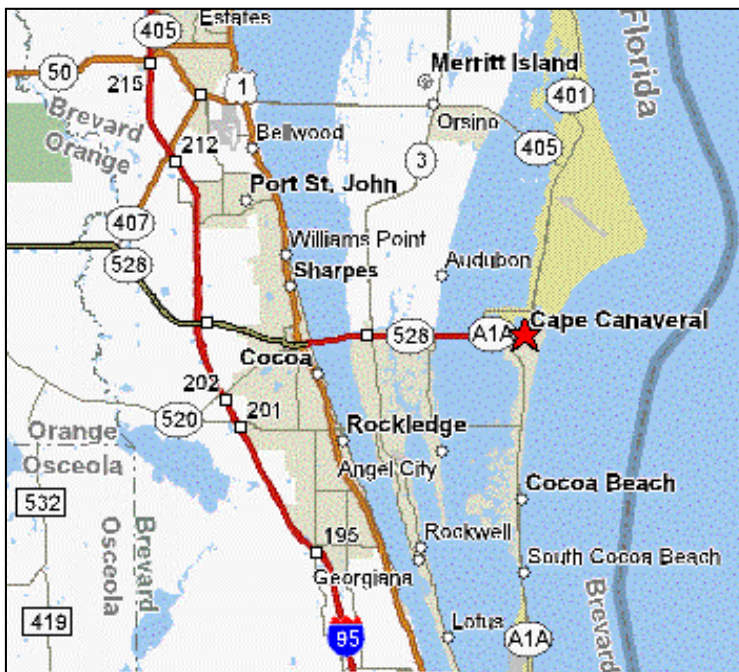
Join us for this unique VIP Bus and Walking Tour where we will visit the Air Force Space and Missile Museum, historic satellite and manned launch sites, the famous Cape Canaveral Lighthouse, and have a drive-by of Kennedy Space Center's Shuttle Launchers, the Vertical Assembly Building, the Crawler-Transporters, the Launch Control Center, the Shuttle Landing Strip, the Mate-Demate System, the KSC Headquarters, and related Center buildings.

Lunch is at the Navy's "Greenhouse" where your choice is Chicken & Rib Barbecue or a vegetarian Plate. During lunch there will be a presentation on the Navy's mission here in Canaveral.

After lunch its back on the bus where Mac McLouth, ASME Member & Canaveral Port Authority Executive Director, has arranged a tour of the Port and its many unique engineering features.

We have chartered a 54-passenger, air-conditioned bus with lavatory and will have an Air Force assigned tour guide to provide running commentary via the on-board public address system.

This Tour is open to Citizens and Foreign Nationals. Air Force Security does require a list of attendees as soon as possible so don't delay, sign up today to save your spot for this unique tour.



Cost – \$17.50/person (includes bus pass and lunch)

RSVP by: Sept 2, 2004 (Non US Citizens) & Oct 2, 2004 (US Citizens)

RSVP to: Dan Johnson - djohns08@harris.com or by phone at 321-729-3686.



DISTINGUISHED LECTURER

"The History, Status & Future of Virtual Product Development: An Automotive Perspective"

This multimedia lecture by Steve Rohde traces the evolution of math-based design and engineering in the automotive industry, and the benefits of that approach. Beginning with the "old days" in which road testing was the primary way to develop automotive vehicles, the lecture describes the movement to laboratory testing, and then to the "virtual" world.

SPONSORED BY: ASME Canaveral Section

**WHERE: Florida Solar Energy Center
1679 Clearlake Road, Cocoa FL**

WHEN: Wednesday, October 20, 2004

Social: 6:00 pm

Barbeque Dinner: 6:30 pm

Lecture: 7:00 pm

Cost for Dinner: \$10 Members/\$5 Students

RSVP by: October 18

RSVP to: Dan at djohns08@harris.com or 312-729-3686