



# The Canaveral Flyer



*A Newsletter of the Canaveral Section of ASME International*

**VOLUME XLVI, ISSUE 3**

**NOVEMBER, 2003**

Executive Committee Chair  
Dan Johnson  
Work: 321-729-3686  
Home: 321-733-5707

Executive Committee  
Vice-Chair  
Stephanie Hopper

Treasurer  
Ken Cook

Secretary  
Will Judd

FIT Student Advisor  
Dr. Hector Guittierez

FIT Student Section Chair  
Joe Clark

Industry Relations  
Scott Seigel

Membership Development  
Leanna Konowicz

Member Interests  
Mark Greby, PE

Minorities & Women  
Stephanie Hopper

Newsletter Editor  
Dan Johnson

Professional Development  
Scott Seigel

FSEC Representative  
& WEB Master  
Dave Chasar

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

**RENEW YOUR  
MEMBERSHIP  
TODAY!**

*Message from the Chair...*

## Mini-Topic Meeting Great Success!

Our second event of the year was well attended and well received. This format made for a good vehicle to get a great deal of information out to our members in a short period of time and I think we will try to use it again. It gives enough time to get the general message out while providing for an open forum for people to get with one another offline where there is a special interest. I know for a fact that **Will Judd** was asked by several attendees if he could give his presentation on the Columbia Shuttle recovery to their group.

November continues to look like a very exciting month with a variety of opportunities for our members to take part in. We have our Distinguished Lecturer Dr. Karen Warden presenting a talk on Orthopedic Engineering at Holmes Regional Medical Center in Melbourne on Wednesday November 5 starting at 6:00pm. Don't miss out on this terrific event and make our section proud by showing your appreciation to Dr. Warden for taking her time out of her busy schedule to come down and see us by attending.

On November 8 we have our Family picnic and on November 15 we travel to the other side of Orlando with the Florida Section to visit Fantasy of Flight to commemorate the 100 year anniversary of flight. See the attached flyers or visit our web page for further information on these events.

I look forward to seeing you in November! If you have any questions or comments for the section please do not hesitate to contact either myself or one of the other officers so that we can respond.

Dan Johnson

## Preview of Coming Attractions

Date	Event	Location	RSVP Date	Contact Info
Nov. 5	Distinguished Lecturer: Orthopedic Engineering	Holmes Hospital, Melbourne	Nov. 3	<a href="mailto:azakaluk@harris.com">azakaluk@harris.com</a>
Nov. 8	Canaveral Section Family Picnic	Tal & Nina Webb's house on Merritt Island	Nov. 6	<a href="mailto:Lkonowicz@msn.com">Lkonowicz@msn.com</a>
Nov. 15	Fantasy of Flight Tour	Fantasy of Flight	Nov. 13	<a href="mailto:djohns08@harris.com">djohns08@harris.com</a>
Dec.	A evening at the Theatre. "Jacob Marley's Christmas Carol"	Phoenix Theater in Downtown Melbourne	TBA	<a href="mailto:djohns08@harris.com">djohns08@harris.com</a>
Jan. 21	Canaveral Section Awards Dinner	TBA	Jan 14	<a href="mailto:djohns08@harris.com">djohns08@harris.com</a>
Jan.	Drawbridge Tour/Meet	TBA	TBA	

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.

## Mini-Topic Meeting a Big Success!

Our October meeting was a little bit different this time around. Instead of one topic we brought you three. This was our first attempt at a mini-topic meeting and the format turned out to be a big hit! We held the meeting at Florida Tech and it was well attended with over 50 of us in attendance from students to senior section members and their guests.

We started off with Jim Johnson, current vice-chair and past chair of Canaveral Council of Technical Societies, or better known as CCTS, speaking on who and what they are and all the things that they do in our local community. First of all they are made up of a conglomeration of 30 plus local professional societies and affiliate organizations. It was formed in the early 60's under the leadership of our own **Jack Wiles** and others who wanted to form a larger engineering network to be able to draw in outside speakers and set up events on a national scale in the fledgling Space Coast. Their mission is to promote and support activities of the Space Coast technical, scientific and engineering professional societies and enhance recognition and stature in the community of member organizations. They promote interchange of information and put proceeds back into the community. CCTS sponsors Space Congress each year. They provide financial support to the local science and math programs in Brevard County schools that in some cases would not occur without the sole help of CCTS. We can take pride as being members of the Canaveral Section of ASME to play a key role as being part of CCTS as one of the stronger local sections. For more information contact CCTS via their web site at <http://www.canaveraacts.org> or via phone at 321-868-1623.

Second up was Ginger Davis Guytri Still of the Science Department of Brevard County Schools. Ginger and Guytri told us of their on going work working with the local teachers to make Brevard tops in the state and in some cases internationally in science related programs. They have been successful by bringing hand on science projects into the classroom. They even have upper class level students help teach the science content to the lower class level students to enhance their skills even further and show the commitment of the older students to the younger students to help build the excitement in learning. They welcome the public to come into the classroom to help participate in effectively teaching science to the students and are always welcoming engineers and college students who want to pitch in and bring forward the next generation of engineers. They are also in search of Judges for upcoming Science Fairs. For further information or to find out how you can help, please contact Ginger Davis at 321-633-100, extension 314 or via e-mail at [davisg@brevard.k12.fl.us](mailto:davisg@brevard.k12.fl.us).

Our final presenter for the evening was our current Secretary **Will Judd** who spoke on the Columbia Shuttle Recovery effort. Will was one of the few members of the team that was sent out from NASA at the Cape to help identify parts and catalog them as to what part of the shuttle they belonged. Will told us about a day in the life of the recovery effort from early morning meetings, walking the line to recover whatever parts they could, the concern for hazardous material and how to handle it, group dinners ,and the tent city they had set up for the recovery workers to sleep. The picture he brought back helped us to understand better the terrain that they had to deal with and the associated risks of this major effort. This was an very informative and interactive presentation. To me, It accentuated the fact that when you take an engineering job you never know what you might get involved in and not only the impact it will have on your personal life, but as in this case the industry, country, and even the world. Thank You **Will** for the part you played in the recovery effort and in being able to share your experience with us!

Dan Johnson

## Upcoming Get Together in December

To take a break from the technical side and help our glide into the upcoming holiday season we want to have a evening at the theater this December 11. We will be going to downtown Melbourne to visit the Phoenix Theatre to watch a new rendition of an old holiday favorite. The play will be "Jacob Marley's Christmas Carol", a look at the story of Scrooge from his deceased partners perspective. The play starts at 8:00pm and we get a discount on groups of 30 or more so sign up today to help us make this a fun evening. Please RSVP by Thursday, December 4 by contacting Dan Johnson at [djohns08@harris.com](mailto:djohns08@harris.com) to sign up or for more information.

## What's in it for me?

Dan recently asked me why I have been active in ASME for 44 years. I had to think about it and try to go back and remember what it was that got me interested in ASME in the first place. I joined while I was a student at the University of Florida. The reason I joined was to get the discount on a review of the EIT (now called Fundamentals of Engineering) exam. I planned to take the exam before I graduated. I didn't know if I would ever use or need a PE but I felt it was better to be prepared. I was shy and had difficulty in meeting and talking with people at the time. I got my first job at Douglas Astronautics in Santa Monica California working on the Thor propellant loading system. I found out I had to make a report to my bosses every week on the progress of my system. I was really nervous reporting in front of a group of people and determined to work on my organizational and presentation skills. Before I could make contact with the local ASME Section I left Douglas and became a migratory missile worker for the next 3 years. It wasn't until I came to Brevard County in 1962 and went to work for McDonnell Aircraft on Mercury as an Environmental Systems Engineer that I became active in ASME and could work on my soft skills.

Jack Wiles signed me up as a charter member of the Canaveral Section. Even though I was putting in 12 to 14 hour days on Mercury I was volunteered to work on a committee to call and remind people when ASME meetings were scheduled. I was elected to be treasurer of the section. I had to learn about budgeting and was forced to become better organized just to do a good job at work and for ASME. I went to what we called the IRAC and RAC sponsored by Region XI and received training in Planning, Organizing, and Presentations. I found that I was doing better at work because I could apply what I had learned and practiced with ASME. While I moved up through the Sections chairs I learned to manage meetings, establish agendas, and motivate volunteers to perform their duties. These skills were directly applicable to my work since I was working with a group of techs and inspectors to do systems testing and trouble shooting. My confidence in presenting a test plan and explaining my ideas increased because of the practice I got working with the Section. I was a good systems engineer, but because I was ahead of my peers in the use of these soft skills in front of my bosses I made faster progress in moving up in responsibility and rank.

When I was Chair of the Section, I became a member of The Canaveral Council of Technical Societies as the ASME Rep. Belonging to this group allowed me to meet and get to know many of the top managers of the Aerospace companies. This is called networking and was very valuable to me. After the Apollo Program was over I was fortunate enough to survive the big layoffs partly because of my acquaintance with many of the managers of the aerospace companies who knew of my capabilities through my work with ASME and CCTS.

Another reason ASME was valuable to me was the meeting speakers, short courses and classes I took during the off hours that kept me current with developments in my field. One of these courses was a P.E. refresher course sponsored by the Section. After completing the course I took the P.E. Exam and passed even though I never expected to use the P.E. Out of the blue one day I was contacted by a large firm of attorneys to do some forensic analysis of an oxygen fire on a 707. My P.E. license paid off after all. I also completed my Masters of Systems Management at F.I.T. I believe that engineers should continually upgrade their technical knowledge both for themselves and their companies. ASME today offers many more opportunities to keep up to date than it did when I was a working engineer.

In summary, I can honestly say that participation in ASME activities has made me a better engineer and aided my advancement into management. Additionally, I have met many friends through ASME that I treasure. I remain active as a member of The Old Guard and as the regional rep to the PP&E Committee. Even though I am retired, I feel obligated to return something to the engineering profession that supported me and my family through out these many years.

J. Tal Webb

## What's happening at Florida Tech

On September 27, 2003 Florida Institute of Technology held it's first biannual combat robot event. Twenty radio-controlled death machines from across the state met up to claim bragging rights for the next month. The event was sponsored by the Florida Tech student chapter of ASME and South-East Combat Robots Florida section (SECR-FI), and with the great cooperation between these two organizations the event went off without a hitch.

The robots were divided into three different weight-classes; skeeters (150g), ants (1 pound), and beetles (3 pound). The robots ranged from big saw blades to wedges, with everything you can imagine in the middle; lifters, spinners, pyramids, bots with MREs for weapons, and even a Hamster ball in the mix. The fights started shortly after 11am and went until 5pm with plenty of action taking place during the course of the day. This event was also a qualifying event for the Florida state championships being held in Alachua, FI on November 15, 2003. For more information on the state championships, or the next event taking place at Florida Tech send an e-mail to [mspurk@fit.edu](mailto:mspurk@fit.edu).

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

**Matt Spurk**

## Thumbnail Bio's

**Dan Johnson** picked up responsibilities of ASME Canaveral Section Chair without a "glitch" when the then current Chair, **Hugh Bain**, an Army Reservist, was suddenly called to active duty in 2002. Dan's background is unusual in that he didn't immediately go to college following High School graduation but, instead, worked for several yeas for a Harris Corporation Division here in Brevard County. Several years later Dan moved to Texas when then Harris Antenna Operations was bought out and became Vertex Communications. Dan worked for the new firm and, concurrently, started working on a BSME at LeTourneau University in Longview, Texas. He graduated in 1993 but it wasn't until 1996 that Dan got the urge to return to Florida where he rejoined Harris. Dan is currently a Mechanical Engineer Level 4 with Harris GCSD in Palm Bay. He and his wife, Diane, live in Palm Bay. Besides his time-consuming duties as Canaveral Section Chair, Dan manages to find a little time to enjoy golf, working around the house, and spending time with family.

**Jack Wiles**

## Brain Teaser

The brain teaser continued to be a hit last month with us receiving several replies and congratulations to **Allan Torsney** for getting it correct! Here is the solution to last months question if you missed it.

### Solution:

Width of the rectangle = Circumference of the cylinder = 40 inches.

Height of the rectangle = Vertical distance on the cylinder = 75 inches (in one twist).

Using Pythagorean Theorem for a right-angled triangle,

Length of the hypotenuse =  $(40^2 + 75^2)^{1/2} = 85$  inches.

Now, the number of twists the creeper makes around the tree trunk is 7 (= 525 / 75). If the length of the creeper (as given by the hypotenuse) is 85 inches in one twist, then the total length of the creeper in 7 twists is 595".

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. At the end of the year we give a gift certificate out to the person who has received the most points for correct answers.

A snake slides through a long cylindrical hole in the ground at 5 centimeters per second. The hole is 7.3 meters in length. The snake takes 13 seconds to enter the hole.

(a) What is the length in centimeters of the snake?

(a) How many seconds does the snake take to exit the hole after entering it?

Good luck!

## **ENCOURAGING GIRLS THROUGH ENGINEERING**

At a Girl Scout Leader Conference on September 17, volunteers and staff from ASME International and ASCE (The American Society of Civil Engineers) led workshops for more than 60 Girl Scout leaders to teach them how to encourage girls to see themselves as engineers. Their best approach: fun, engaging, girl-friendly engineering activities.

During each of the workshops, the Girls Scout Leaders enjoyed engineering activities like: Flinker, Paper Bridge, Toxic Waste Dump, Catapult, Egg Bungee, and Mystery Mechanisms. Descriptions of the activities, links to lesson plans, as well as three power point presentations, are all available on the ASME Pre-college website:

<http://www.asme.org/education/precollege/gsus>

If you'd like more information on encouraging girls through engineering activities, contact Dawna Schultz at <mailto:schultzd@asme.org>

## **2004 U.S. MATH-SCIENCE PARTNERSHIP PROGRAM**

On September 16, the U.S. National Science Foundation issued a program solicitation for the 2004 Math and Science Partnership (MSP) that contains a number of revisions to the program. (The Math-Science Partnerships support an array of post-secondary and K-12 institutions working together to strengthen K-12 Science, Technology, Engineering and Mathematics (STEM) education. Participating universities, non-profits, and schools share the awards, which can be as high as \$15 million over five years.)

The new Request for Proposals continues the MSP Targeted Partnerships, but NSF is now seeking proposals for programs at targeted grade ranges (emphasis is on the middle and high school levels) and/or programs with a specific disciplinary focus in science or math.

NSF also seeks to fund new Teacher Institutes for the 21st Century that will help to develop teacher leaders, master teachers, and school-based intellectual leaders in math and science. The Teacher Institutes would, in effect, "reflect the enthusiasm and disciplinary spirit of the original NSF Institutes," which ran from 1954 to the mid-1970s and stressed content matter.

Letters of intent for the proposals (optional, but encouraged) are due November 17, 2003; full proposals are due December 16, 2003. For more information, go to [http://www.nsf.gov/pubs/ods/getpub.cfm?ods\\_key=nsf03605](http://www.nsf.gov/pubs/ods/getpub.cfm?ods_key=nsf03605)

## **NOMINATIONS SOUGHT FOR AWARDS RECOGNIZING ME CONTRIBUTIONS**

Nominations are being accepted for the ASME's 2004 Ben C. Sparks and the Frank Von Flue Medals, which recognize educational contributions to the mechanical engineering profession within and outside of academia.

- Frank Von Flue Medal

Named in honor of the late Frank von Flue, member of the ASME Board of Governors, an industrial manager and a pioneer in promoting professional development of engineers, this award recognizes significant contributions by an individual, group, or organization to the promotion of lifelong learning for mechanical engineers and the development or implementation of strategies and/or materials for lifelong learning.

- Ben C. Sparks Medal

This award recognizes eminent service to mechanical engineering technology education through contributions to ASME; to higher education professional service; and to the teaching and/or research faculty roles in mechanical engineering and mechanical engineering technology. Each award consists of a \$1,000 honorarium and a bronze medal. They will be presented at an award ceremony at the ASME International Mechanical

## **TEST YOURSELF! FREE ONLINE TECHNICAL ASSESSMENTS**

Test yourself on a variety of technical topics with the latest addition to ASME's on-line professional development tools - FREE technical assessments. Topics include FE, GD&T, Project Management, Section VIII. Div 1, and more.

Go to <http://elearn.asme.org/courses/courselist.htm> for more information or contact Thomas Kuehl at <mailto:kuehlt@asme.org>. More topics will be added so check in for the most recent additions.



ASME Canaveral Section Distinguished Lecturer

# Karen E. Warden: Orthopedic Engineering

Wednesday, November 5, 2003

Time: 6:00 PM

Location: Holmes Regional Hospital  
Auditorium (Melbourne, FL)



*Who should attend: Medical professionals, Engineers, and anyone with an interest in biomechanics, particularly orthopedic Engineering. Children are welcome.*

Karen Warden, ASME Distinguished Lecturer, describes the history of the discipline, the application of mechanical engineering fundamentals to biomechanics, the types of implants and their materials, the role of the engineer and some of the emerging technology. Samples of orthopedic implants are exhibited.

Karen E. Warden is a doctoral candidate at Case Western Reserve University specializing in spinal biomechanics. She has been active in the field for the past ten years in academic, industrial, and consulting capacities, has co-authored numerous peer-reviewed publications and received research and achievement awards.

**Cost – Lecture: Free; Pizza/Drinks: \$5.00**

**RSVP by: November 3, 2003**

**RSVP to: Alan Zakulak, [azakaluk@harris.com](mailto:azakaluk@harris.com)**



ASME Canaveral/Florida Section Presents

# Tour – Fantasy of Flight



When: Saturday – Nov. 15, 2003

Time: 10:30 AM @ Fantasy of Flight (OR 9:00 AM @ J.C. Penney at Florida Mall, Orlando)

Price – \$22.50 /Adult (less for Children & Seniors) (does not include lunch)

*This collection of vintage aircraft is located just 45 miles south of Orlando on I-4 at Exit 44.*

*Attractions: Unlimited simulator flights in Fightertown, a backlot tour at 11:30, a restoration shop tour at 12:45, and the aircraft of the day flyover at 2:30.*

*Lunch is on your own at the In-Flight cafe.*

*Bring family and friends for this unique experience to celebrate 100 years of flight!*



RSVP by: Friday, Nov. 13, 2003

RSVP to: Dan Johnson, [djohns08@harris.com](mailto:djohns08@harris.com)

**\*Limitations\***

**ASME A17.1 Safety Code for Elevators and Escalators**  
**February 2-4, 2004 - Cocoa Beach Hilton**  
**A Professional Development Course offered by**  
**The ASME Canaveral Section to all interested Technicians & Professionals**  
321-757-0486 \* 321-255-1965 fax

**Description:**

WHAT YOU WILL LEARN From an expert instructor, get a comprehensive review and analysis of the ASME A17.1 Safety Code for Elevators and Escalators. All phases of the industry are discussed: design, construction, installation, operation, maintenance, alteration, inspection, and testing. The course also includes a review of the elevator and escalator requirements under the Americans with Disabilities Act (ADA).

WHO SHOULD ATTEND Manufacturing; modernization; maintenance personnel; architects; design and consulting engineers; state and municipal elevator, electrical and building inspectors; private inspection agencies and insurance industry loss prevention engineers. This course is especially helpful for people planning on taking certification examinations such as the NAESA International, Building Officials and Code Administrators, Southern Building Code Congress International, International Conference of Building Officials, Lift Technologies International and Civil Service exams.

SPECIAL FEATURES Complimentary A17.1 Handbook on Safety Code for Elevators and Escalators. Please bring the ASME A17.1 - 2000 Code with all current supplements.

**Short Course Outline:** · Elevator Machinery and Equipment Capacity and loading; driving machine, brakes and traction; machinery and sheave beams, supports and foundations; suspension ropes and connections; car frames and platforms; counterweights; guide rails; governors; safeties; buffers; seismic requirements · Hoist way and Elevator Car Construction Hoist way enclosures; building code requirements; machine rooms and machinery spaces; location and guarding of counterweights; guarding of exposed auxiliary equipment; pits; horizontal and vertical clearances; protection of spaces below hoist ways; hoist way entrances; door operation; car enclosures, lighting and ventilation · Elevator Electrical Equipment Operating devices and control equipment; terminal stopping devices; electrical wiring in hoistway and machine room; National Electrical Code requirements for elevators and related equipment · Emergency Operations and Signaling Devices Emergency signaling devices (Rule 211.1); Firefighters' service (Rules 211.3 - 211.8); Standby power (Rule 211.2) · Hydraulic Elevators Hoistways, machinery and equipment - variations from electrical elevator requirements; plungers and cylinders; valves, supply piping, fittings; tanks; terminal stopping devices; operating devices and control equipment · Escalators and Moving Walks Construction requirements; driving machine motors and brakes; operating and safety devices; lighting, access and electrical work · Overview of Miscellaneous Elevator Codes and Standards All parts not covered in detail; A17.2 Inspectors' Manuals; QEI-1 Standards for the Qualifications of Elevator Inspectors; A17.3 Safety Code Existing Elevators and Escalators; A17.4 Evacuation Guide, Etc. · Accessibility Regulations For Elevators Overview of ADA; ADAAG; CABO/ANSI A117.1

**About the Instructors:** D.A. Swerrie. P.E. brings over 45 years of elevator expertise industry insight. His elevator career started in the field -- servicing, repairing, and answering trouble calls. He then spent some 20 years working for the state of California as an elevator inspector and elevator safety program administrator. He is a certified inspector, an active member of NAESA International, a member of the A17.1 NIRC of IAEE, and of NAVTP.

2.5 Days of Instruction:

Early Bird Member Rate = \$1295

Member Rate After December 23 = \$1395

2.5 Days of Instruction:

Early Bird Non-Member Rate: \$1395

Non-Member Rate After December 23 = \$1495

2.5 days / 2.1 CEUs/21 PDHs

Contact your Canaveral ASME Industry Relations  
Leader Scott Seigel at 321-757-0486 to Register.

Name \_\_\_\_\_

Company \_\_\_\_\_

Street Address \_\_\_\_\_

City/State/ Zip \_\_\_\_\_

Phone \_\_\_\_\_

**How To Perform Elevator Inspections Using ASME A17.2**  
**February 4-6, 2004 - Cocoa Beach Hilton**  
**A Professional Development Course offered by**  
**The ASME Canaveral Section to all interested Technicians & Professionals**  
321-757-0486 \* 321-255-1965 fax

**Description:**

This comprehensive course is based on ASME A17.2 Guide for Inspection of Elevators, Escalators and Moving Walks. Inspection test procedures are demonstrated with detailed explanation of techniques and concepts. You will also learn how to determine: · Safety sliding distance · Top and bottom car, counterweight clearances, runby · Working pressure for hydraulic elevators · Governor pull through and release carrier pull out forces

**WHO SHOULD ATTEND** This course is designed for individuals involved in inspecting, testing, installing and maintaining elevators. Those who have benefited from the previous course will find this new course essential for updating their code knowledge and inspection skills. It includes the latest code requirements and is especially suitable for: · Federal, state, city or any other jurisdictional inspector · Insurance inspectors, private inspection agency personnel and in plant safety inspectors · Elevator consultants, engineers, architects and technical managers · Elevator technicians, elevator constructors and elevator mechanics are required to conduct test and/or repair and install elevators to meet elevator code requirements · Building managers, building engineers and supervisors who have elevator maintenance or contracting responsibility · Service contractors and managers

Please bring a copy of ASME A17.1 -2000 Safety Code for Elevators and Escalators, ASME A17.3-1996 Safety Code for Existing Elevators and Escalators, and the 1996 National Electrical Code as well as a calculator.

**SPECIAL FEATURES AND BENEFITS** · Workshop format using new videotape examples covering both inspectors' manuals and sections on inspection and testing · Receive a copy of ASME A17.2- 2001 Guide for Inspection of Elevators, Escalators & Moving Walk, Elevator Industry Inspection Handbook and Elevator Industry Field Employees' Safety Handbook-2000

**Short Course Outline:** · Review of inspection requirements for each item on the inspection checklist in the new Inspectors' Manual for Elevators · Sample worksheets to record and clarify elevator test requirements and measurements · Review of safety practices for inspection and maintenance that are highlighted in the inspectors' manuals and Elevator Industry Field Employees' Safety Handbook 2000 edition · Drawings and diagrams that illustrate code requirements and checking techniques · Participant interaction with the instructors and each other regarding inspection techniques show on the video tape

**About the Instructors:** Zack R. McCain, Jr., PE is an ASME Fellow and Certified Elevator Inspector as provided for ASME QEI-1. He has served on the A17.2 Inspectors Manual Committee since 1976 and the A17.1 Main Committee (now the Standards Committee) since 1985. He served as Vice Chairman of that committee from 1986 to 1999. He has been a member of ASME QEI-1 since its beginning. He is Chairman of the A17.1 Working Committee on Maintenance, Repair and Replacement. He has operated McCain Engineering Associates, Inc. since 1990 specializing in vertical transportation. Prior to that time he served with various federal agencies including the U.S. Army Corps of Engineers, General Services Administration and U.S. Postal Service.

2.5 Days of Instruction:

Early Bird Member Rate = \$1295

Member Rate After December 23 = \$1395

2.5 Days of Instruction:

Early Bird Non-Member Rate: \$1395

Non-Member Rate After December 23 = \$1495

2.5 days / 2.1 CEUs/21 PDHs

Contact your Canaveral ASME Industry Relations Leader Scott Seigel at 321-757-0486 to Register.

Name \_\_\_\_\_

Company \_\_\_\_\_

Street Address \_\_\_\_\_

City/State/ Zip \_\_\_\_\_

Phone \_\_\_\_\_



# **AMERICAN SOCIETY OF MECHANICAL ENGINEERS**

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

