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This Month's Meetings

Tuesday, December 6th: EXCOM Meeting Meeting starts at 5:30PM At TECO Plaza Register online at <u>http://time2meet.com/fwcs-excom/index.html</u> Open to all FWCS Members

Robotics and Automation Society Meeting <u>The Next Meeting is Tuesday ,January 17, 2011</u> Go to the RAS Page of FWCS Website for Latest Info!

Tampa Brass and Aluminum TourPaul Rehsi, VP of Sales and EngineeringTuesday December 13, 2011Time: 6:00PMDetails on page 4

Risk Management Web Seminar Speaker Dr. Carolyn Turbyfill December 14, 2011 Time: 1:00 - 2:00PM <u>Details on page 5</u>

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This Month...(Editor's Column)

In the January issue of Air and Space Magazine there is an article on Burt Rutan, one of the most prolific designers of aircraft that the U. S. has ever produced. His designs have been flown by General Aviation pilots, astronauts and been tested by the military. They have been into space, circled the earth and raced at the Reno Air Races. In all, he has produced 39 aircraft designs although not all have gone into production. Most aerospace engineers would be considered successful if they work on one or two major designs in their career. His first design in 1972 helped to popularize composite homebuilt aircraft and make the canard wing, a safer layout, a commonplace sight. The Voyager was the first aircraft to fly unrefueled around the earth and Starship One was the winner of the X-Prize by flying a privately built craft into space. He is another example of what Americans are good at; innovation. No other country has created so many inventions that have changed the world as the US or has the environment that encourages innovation and creativity..



Did You Hear About It?

The local EMBS chapter held a meeting on Nov 3. The presenter was Dr. Robert Frisina, who spoke on "Understanding and Treating Hearing Loss: Neuroengineering and the Auditory System". Dr. Robert Frisina is a Professor, Director of Biomedical Engineering, and Director of Global Center for Hearing and Speech Research at USF.

The presentation started with some interesting statistics regarding hearing impairment and deafness; which affects over 10% of the population worldwide. This includes 38 million Americans. The incidence of noise related damage is increasing, and this also affects our military personnel; to the tune of 18 percent per year for this type of disability in the military.

Dr. Frisina briefly reviewed the anatomy of the inner ear, and then discussed some of the research that is being done to help understand and prevent damage to the sensory cells; specifically the organ of Corti, within the cochlea. Some of the therapies covered were MicroSystems, like an in vivo Smart Pump drug delivery, gene therapy, and stem cell therapy. There were a total of 15 attendees at this meeting.

According to the Center for Hearing and Communication, "Exposure to a noisy subway, for just 15 minutes per day overtime, can cause permanent damage to hearing over time". Over 30 minutes of lawnmower or power tool use, or less than 8 minutes in front of the speakers at a rock concert can begin to cause permanent hearing loss. Decibel levels for some commonly encountered noises can be found at the following American Academy Of Audiology link. You might be surprised about what your ears are exposed to.

http://www.audiology.org/practice/resources/PublishingImages/NoiseChart85x 11.pdf





Signal Newsletter Editor Wanted!

The EXCOM is looking for a new Signal newsletter editor! The current editor is moving on to other things and a replacement is needed. Anyone interested should be able to use Microsoft Word reasonably well. I will show someone how the process works in producing the Signal every month and be available as support. Contact me at <u>rsancz@verizon.net</u> or 813-361-7563 for more information.

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Time is Running Out Renew Your IEEE Membership Today!

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http://www.ieee.org/membership_services/membership/r enew/index.html

If you renew your membership for 2012 by 15 November 2011, you will be entered to win one of five Apple® iPad® tablets. See above URL for details.

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Advanced Computing and Communications Society and IEEE Computer Society Sign Cooperative Agreement

LOS ALAMITOS, Calif., 2 November, 2011 – ACCS, the Advanced Computing and Communications Society, has signed a cooperative agreement with the IEEE Computer Society to share resources to further serve the needs of both organizations' members.

ACCS is a registered scientific society in India founded to provide a forum to individuals, institutions, and industry to promote advanced computing and communication technologies. It is widely recognized as the premier organization

for computing professionals in India, delivering a broad array of resources that advance the computing and networking disciplines and enables professional development.

"This new partnership strengthens the commitment of both the ACCS and the IEEE Computer Society to support computer professionals in India. We are very proud to be associated with the ACCS," said Angela Burgess, the Computer Society's executive director.

Under the agreement between ACCS, IEEE, and the IEEE Computer Society, ACCS will be listed as a partner and share Computer Society technical articles with its membership. The Computer Society will support the International Conference on Advanced Computing & Communications (ADCOM), ACCS's annual flagship event.

In addition, the ACCS will serve as a Registered Education Provider (REP) for Computer Society <u>software development</u> <u>certifications</u> and other education and training materials. ACCS joins 12 other <u>REPs</u> in China, Egypt, India, Russia, Sri Lanka, and the United States.

The agreement is intended to "encourage the exchange and dissemination of technical information, and to promote understanding and cooperation between the members of the Advanced Computing and Communications Society and the IEEE Computer Society."

ACCS intends to promote an environment where its members enjoy significant access to the Computer Society's current research publications on world changing technologies. "Our aim is to help technical schools in India build the understanding and appreciation of firsthand exposure to research publications and the important role that technology can play in creating a better tomorrow," said Dr. S. K. Sinha, president of ACCS





Tampa Brass and Aluminum Tour

Date:	Tuesday, December 13, 2011
Time:	6:00pm
Speaker:	Paul Rehsi, VP of Sales and Engineering
Location:	8511 Florida Mining Blvd, Tampa, FL 33634
	(First street East of Anderson Road along Waters Ave, behind the FedEx facility)
Cost:	Free of Charge to attend!
RSVP:	Online at: http://time2meet.com/fwcs-pes4/index.html (Select Reservations)
	Space limited to the first 20 registrants!!!
Questions:	Tim Doolittle at 813-735-2722 or <u>tdoolittle@fastmail.fm</u>

Tampa Brass & Aluminum Corp. began as a three-man foundry in 1957. Sam Leto Sr., a first generation



American of Italian immigrant parents, his 19 year old son, Sam Jr. and an uncle leased a small building and began pouring metal castings for the shipping and phosphate industry in the Tampa area. Between the three, they made the molds, poured the metal, dumped the molds, finished the cast pieces, then packed and delivered them to the customer.

Just prior to 1986, TB&A became aware that the government, Raytheon, McDonnell-Douglas and other defense contractors were seeking quality minority suppliers of castings and machining. By this time, Sam Jr., whose mother was Cuban-American, was running the

business. He recognized the opportunities his Hispanic descent would lend him, and planned for increased business. TB&A built a new facility adjacent to the existing machine shop. The result is its present location on 5 acres of land and a 56,400 square foot facility.

Through the years, Tampa Brass & Aluminum has provided parts and supported programs such as Hawk, Patriot, AMRAAM, Sidewinder, Tactical Tomahawk, Maverick Missiles, Armored Tanks, Various Radars, Communication Systems, Power Breaker Units, Electrical Switches, Submarines, Destroyers, Mine Detectors, and Minehunters.

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Substation Integration Seminar Follow Up

PES held a seminar on Substation Integration, Wednesday November 2, 2011 at Seminole Electric Co-Op Offices in Tampa Florida. This was an opportunity for Ed Atienza and Tim Pilcher to present and provide insight on Substation integration architectures, Communications protocols, Time synchronization and Security. This seminar was well attended.

On behalf of the local PES Chapter, my thanks Schweitzer Engineering Laboratories (SEL) by providing us the speakers and to Seminole Electric for their continued support and assistance in allowing us the use of their facility to hold our functions.

Serge Beauzile



IEEE-USA Risk Management Seminar Series

Seminars are monthly, started July 20 with "Cyber Security in the Electric Utility Sector" For details/registration, visit:<u>http://www.ieeeusa.org/careers/webinars/2011/Risk-Management.html</u> **Overview**

This webinar discusses discuses the role that software can play in fostering the risks of a physical system (unless the software-induced risks are mitigated). Physical systems that rely heavily of software functionality, control, or automation all require that specific categories of software-borne risks are lessened. However to accomplish this, a clearer understanding of the interplay between the physical and non-physical (software) components in a completed system and in a particular environment is warranted. The webinar also provides hints on how to sell and implement software risk mitigation at work.

Cost is \$19 per seminar (\$89 for the series) for IEEE members (non-member rate \$38/\$189). Participants will have access to a host of online risk resources, including articles in IEEE-USA's Today's

Engineer<http://www.todaysengineer.org/>, webinar replay, risk articles, blogs, comment/discussion with risk experts, and much more. The next seminar is shown below.

14 December 2011

Time 1:00PM – 2:00PM Eastern Daylight Time Risk-based Metrics for Software System Design, Development and Test Dr. Carolyn Turbyfill



IEEE-USA Government Fellowships

Each year, IEEE-USA sponsors three qualified IEEE members to serve as government fellows: one Engineering & Diplomacy Fellow and two Congressional fellows. The fellows spend a year in Washington, serving as advisers to the U.S. Congress or key U.S. Department of State decision-makers. IEEE-USA's Government Fellowships link engineers with government, providing a mechanism for IEEE-USA members to learn firsthand about the public policy process through personal involvement.

The congressional fellowship consists of an appointment to the personal staff of a U.S. Senator or Congressman, or to the professional staff of a Congressional Committee. The Fellow along with the Congressional sponsor and IEEE-USA, negotiates a starting date, although IEEE-USA recommends that Fellowship terms run from January 1st to December 31st. For an application Kit for the 2012 Congressional Fellowship Program, visit: http://www.ieeeusa.org/policy/govfel/cfapply.asp

The State Department fellowship begins in January of each year and offers an opportunity for an engineer to provide technical expertise to the State Department, and help raise awareness of the value of engineering input while learning about and contributing to the foreign policy process. For an application Kit for the 2013 Engineering & Diplomacy (State Department) Fellowship Program, visit:

http://www.ieeeusa.org/policy/govfel/state.asp

The postmark application deadline for 2013 Fellowships is 16 March 2012. For more information, visit: http://www.ieeeusa.org/policy/govfel/default.asp

Washington Internships for Students of Engineering (WISE)

SUMMER 2012 PROGRAM Monday, 4 June - Friday, 3 August:

WISE seeks applications from outstanding engineering students who display evidence of leadership skills and have a keen interest in public policy. Minority students are encouraged to apply.

Applicants should select a sponsoring society(s), fill out an application form, write two (2) brief essays in response to questions, arrange for two (2) faculty references, and forward an official transcript. The deadline for Summer 2012 applications is December 31, 2011. For more info and application forms, please visit: <u>http://wise-intern.org/application/index.html</u>

"...one of the best summers of my life. One which truly transformed my dreams and goals.when I left D.C. I really wanted to instill in my fellow engineers the appreciation of the interaction between public policy and engineering." -- Marc Canellas, WISE 2011



IEEE USF Student Branch: S-PAVe and Senior Banquet

This past month was a busy one for the IEEE Student Branch at the University of South Florida Tampa campus. We hosted an S-PAVe where Dr. Jim Anderson and Mr. Jim Watson exposed engineering students to valuable information on how to network and how to effectively present material to a large audience. The S-PAVe was a huge success where 30 engineering students gained skills that is never taught in classes. The Senior Banquet also happened Saturday the 19th. Students, professors and sponsors came out to congratulate all the graduating seniors on all the hard work and determination they showed during their undergraduate career.

David Touvell

IEEE USF Events and Fundraising Chair <u>dtouvell@mail.usf.edu</u>



IEEE Senior Banquet: Mr. Serge Beauzile with USF Professors



IEEE S-PAVe: Mr. Jim Watson with IEEE USF Officers



IEEE Senior Banquet 3: Victor Basantes introducing Dr. Jim Anderson



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2012 IEEE International Electric Vehicle Conference

March 4-8, 2012 at TD Convention Center and Clemson University International Center for Automotive Research

The first IEEE International Electric Vehicle Conference provides a unique cross-organizational platform to exchange information among thought leaders of the fast-growing electric mobility ecosystem and to discuss new trends in technology, engineering, standards and deployment aspects on a global scale. IEVC is a venue for electrical vehicle designers, component and infrastructure system developers, manufacturers, utility experts, corporate executives, technical analysts, researchers, educators, entrepreneurs, venture capitalists, legislators, regulators and standardization experts to share a joint interest in the transformation of the transportation industry via electrification. For more information go to http://electricvehicle.ieee.org/



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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	1	2	3
4	5	6 EXCOM meeting at TECO Hall, see page 1	7	8	9	10
11	12	13 Tampa Brass and Aluminum Tour, see page 4	14 Risk Management Seminar, see page 5	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31 New Years Eve

December 2011 Calendar of Events (For more information see P. 1) inside this Signal...