IEEE

the LYNX

May 2013

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IEEE/Orange County Website:
www.ieee.org/ocs

Go For GOLD

Dear fellow IEEE members,

Graduates of the Last Decade (GOLD) is an Affinity Group within IEEE that was formed in the Orange County Section earlier this year. The overall purpose of GOLD is to help ease the transition from life as a university or college undergraduate to life as an engineering professional, either working in industry or in graduate school. Upon completion of their undergraduate engineering degree, student members will be automatically enrolled in GOLD when they update their IEEE membership from "Student Member" to "Member".

The vision for GOLD within the Orange County Section is to excite and empower the next generation of engineers to get involved and make a difference within IEEE. In addition, GOLD offers a place for these young engineers to network, interact, innovate, and socialize with the 300 other active GOLD members here in Orange County.

There are already many exciting events planned for GOLD in the coming months, but there is still much work to be done to make this endeavor a success. We need your help! The following is a list of current positions and volunteer opportunities available:

- **Chair –** Josh Lubawy
- **Vice-Chair –** Balaji Narasimham
- **Treasurer –** Scott Gump
- **Industry Relations – Vacant**
- **UCI Alumni Relations – Vacant**
- **CSUF Alumni Relations – Vacant**

If you would like to get involved, or have suggestions for activities or events GOLD could offer, please don't hesitate to contact me at josh.lubawy@ieee.org.

In conclusion, as our student members in and around Orange County near graduation, I would like to take this opportunity to congratulate you on your accomplishments and welcome you to the IEEE GOLD community! I am excited to share this opportunity with everyone, and if there are any questions, comments, or suggestions, once again I can be contacted at josh.lubawy@ieee.org.

Thank You,
Josh Lubawy, Newsletter Technical Editor
Chair, Graduates Of the Last Decade (GOLD) Affinity Group
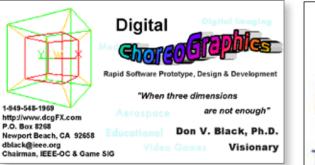josh.lubawy@ieee.org

OC IEEE History

I am seeking any source of information regarding the early OC IEEE. I lived and worked in LA County and was active in the LA Section in the IRE Professional Group on Automatic Control, didn't move to OC 'till '65 and wasn't really active in the OC section 'till the early '70s, so my ignorance runs deep. I really need your help in reconstructing the "early days" of our OC Section.

If you have any information, please respond. Take the initiative and shout, "Yes, I remember something!" I'll bet you do.

Thanks,
Stan White
stan.white@ieee.org

IEEE Member-Owned Business Advertising

Presented by the Orange County Section
Chaired by Mr. Dino Roman, AIAA Associate Fellow

Tenth Annual
AIAA Southern California Aerospace Systems and Technology Conference & Banquet

Saturday May 4, 2013
Doubletree Club Hotel
Orange County Airport
7 Hutton Centre Drive
Santa Ana, CA 92707

The AIAA SoCal ASAT Conference brings together seasoned and new engineers, researchers, leaders, managers, and students and provides a forum to exchange ideas, review achievements and discuss the future direction of aerospace in the area. The Orange County Section's Annual Banquet is held in the evening following the conference and recognizes the accomplishments of some of our members.

Conference Keynote Speakers
Mr. George L. Pla, President and CEO, and **Mr. Roberto Ramirez**, Senior Project Manager, Cordoba Corporation, *Space Shuttle Endeavour Transport Project*
AND
Mr. Michael Kisska, X-48C Project Manager, Boeing,
Flight Testing the X-48C - Advancing the Blended Wing Body Concept
Banquet Speaker
Mr. Robert Zimmerman, Award-winning Science Journalist and Historian,
Predicting the Future of Space Travel, from the Past

SCHEDULE

8:00 - 8:45 AM	Check-in and continental breakfast
8:45 - 9:00 AM	Welcome/Introductions
9:00 - 10:00 AM	Mr. George L. Pla / Mr. Roberto Ramirez
10:00 - 12:00 PM	breakout sessions
12:00 - 1:30 PM	Luncheon / Networking
1:30 - 2:30 PM	Mr. Michael Kisska
2:30 - 5:00 PM	breakout sessions
5:00 - 6:00 PM	Banquet Check-in / Network
6:00 - 8:30 PM	Banquet / Mr. Robert Zimmerman

Conference Registration
(Incl. breakfast and lunch)
Student: $50.00 / High School Student: $20
AIAA Member: $65.00
Non-Member: $75.00*
Evening Annual Banquet
Student: $30.00
AIAA Member: $35.00
Non-member: $45.00*

* Free admission to both events for non members with paid AIAA membership application.

FOR A LIST OF PRESENTATIONS AND A MAP:
http://events.r20.constantcontact.com/register/event?o
eidk=a07e6ttmllc6ad75fd6&llr=vitem6fab

PRE-REGISTRATION IS REQUIRED BY 26 APRIL 2013
(Pre-registration is a financial commitment unless cancelled 48 hours prior to the event.)

Register Online:
http://events.r20.constantcontact.com/register/event?
oeidk=a07e6ttmllc6ad75fd6&llr=vitem6fab

For more information contact:
Dino Roman 714-896-1744
dino.roman@boeing.com

May 21-23, 2013
Space Tech Expo

May 21-23 Space Tech Expo, Long Beach Convention Center

The theme for the 2013 Space Tech Conference is "The Business Case for Space". The conference's program will help business owners identify space supply chain and ecosystem products and services that will generate revenue and growth for their businesses.

Space Tech Expo 2013 will host the free-to-attend Satellite Summit. The Satellite Summit will run alongside the Space Tech Exhibition and Conference and will take place in the heart of the exhibition hall with three days of interactive discussions, expert-led case studies, and networking opportunities with delegates from international governments.

When:
May 21-23

Where:
Long Beach Convention Center

Info & Register: Free pass to Exhibit and Satellite Summit
http://www.spacetechexpo.com/satellite-summit

IEEE Aerospace & Electronics Systems Society Orange County Chapter (OC-AESS) presents:

IEEE Lecture "Crossing the Threshold: The Case for Increasing Our Exploration of Space"

Speaker: Mr. Paul Wieland, P.E.

Date: Wednesday, May 8, 2013

Time: 6:00PM - Social and Networking
6:30PM - Dinner
7:00PM - Meeting and Talk

Location: Brandman University, 16355 Laguna Canyon Road, Irvine, CA 92618

Cost: Dinner - $10
Dinner (Student/Unemployed) - $5
Presentation Only - Free

RSVP: kyu@ieee.org

Contact: Dr. Kai-Bor Yu, Chair of IEEE OC-AESS

Abstract:

What does the exploration of space do for society? It is not just about increasing our knowledge of the solar system and universe, though that is important, too. It's also about addressing the challenges that we face as a society and civilization, such as energy supply and resource acquisition. But more immediate concerns can also be addressed, including international security and job creation. Space exploration is maturing to the point where it is possible to increase the number of missions while greatly reducing the cost, which would open up possibilities for greater and more useful discoveries for mankind to be made. The factors that will enable major exploration and development of space are converging and "the beginning is near" for a period of rapid advancements in technology to bring the benefits of space exploration to Earth.

Bio:

Mr. Paul Wieland grew up during the space race era and wanted to be an astronaut or work for NASA in some capacity. By the the time he graduated from high school, however, NASA was reducing its workforce. After earning degrees in botany and mechanical engineering, Paul began working for NASA in 1983 as a co-op student and had small roles in the *Hubble* Space Telescope and Spacelab 3 missions, but spent much of his career developing the life support system for the International Space Station. In 1994, his report *Designing for Human Presence in Space: An Introduction to Environmental Control and Life Support Systems* was published as a NASA reference publication (RP-1324). In 2010, his book for the general public, *Crossing the Threshold: Advancing into Space to Benefit the Earth,* was published and in May 2011 it was awarded a gold medal by the Independent Publisher Book Awards, an international competition.

The IEEE Consultants' Network Invites You to Our May 25th Meeting

Consulting Approaches and Fee-Setting Strategies

At our May meeting, the Orange County Consultants' Network (OCCN) and the Los Angeles Area Consultants' Network (LAACN) will feature presentations by two of our experienced members, Cash Sutton and Bob Gauger, who will share their business experience and practices. Also, Bob Gauger will discuss fee-setting strategies. This meeting will be helpful to those considering consulting as well as those with an active consulting business.

Cash Sutton founded Sutton Enterprises in February 2000 as a sole proprietorship that included two businesses: an electrical engineering consulting firm and a distribution company. Although the organization is struggling in this economic environment, because of the company's focus on renewable energy, the future for Sutton Enterprises is bright. In fact, Sutton Enterprises has teamed with other engineers and architects in order to capture larger projects. Cash is president and CEO of Sutton Enterprises; a licensed insurance agent in California; and an Adjunct Professor at Los Angeles Trade Tech College, where he teaches classes in Process Technology. Much of his experience is with the design, construction, start-up and maintenance of electrical power systems. As a member of the Idea Club, Cash has also become familiar with various aspects of entrepreneurship. He has used this knowledge to provide assistance to individuals who needed technical assistance in developing personal inventions. He has also developed strong management and consulting skills from meeting the demands of his job responsibilities and organizational affiliations.

Bob Gauger says that if you provide a specialty consulting service in a field most companies don't have an in-house capability for, and work in an industry where the jobs can't be sent overseas, the companies will come to you and ask for your help. He will share his technique with you and tell you what he thinks that he is doing wrong as well as right. He will also discuss the IEEE fee surveys and how you can use them to create your own consulting fee strategy—you need to know what fees others are charging if you want to survive. Bob has been an IEEE member since 1948—it was the AIEE and the IRE back then. His motto is DON'T

RETIRE - CONSULT, and he has lived that motto since 1990, having helped set up the Consultants' Networks and conducted consultants' fee surveys at both the local and national levels. His specialty is reliability, availability, and maintainability engineering, and he has both US and international clients. He proves that, when it comes to consulting, there is no age limit.

Date: Saturday, May 25, 2013

Schedule:

- 10:00 AM - Introductions & Presentation
- 12:00 PM - Lunch & Networking

Cost: The event is free, including lunch, with reservation. Send requests for reservations or questions to masenten@pacbell.net.

Location: Room 321, Engineering (E) Building, Cal State University, Fullerton, CA 98231

Parking: Saturday parking is free. Enter from Nutwood and take Folino Drive north to Parking Lot E. Go to http://parking.fullerton.edu/parking/Maps.asp for more details.

Check out the IEEE-USA Consultants website at www.ieeeusa.org/business.

The IEEE Orange County
Upcoming Events

May 4, 2013
Tenth Annual AIAA Southern California Aerospace Systems and Technology Conference & Banquet

May 8, 2013
IEEE Lecture: "Crossing the Threshold: The Case for Increasing Our Exploration of Space"

May 21-23, 2013
Space Tech Expo

May 25, 2013
Consulting Approaches and Fee-Setting Strategies

June 12, 2013
IEEE Distinguished Lecture: "Backside Lunar Observatory"

http://sites.ieee.org/ocs/

IEEE Aerospace & Electronics Systems Society (AESS) Presents

IEEE Distinguished Lecture: "Backside Lunar Observatory"

Speaker:
Dr. Myron Kayton, Life Fellow of IEEE

Date:
Wednesday, June 12, 2013

Abstract:
Dr. Myron Kayton will talk about the benefits of establishing a backside lunar observatory. Thus far, all manned operations have been on the front side of the Moon, in direct radio contact with Earth. A backside observatory would be shielded from radio and optic emissions from Earth by the mass of the Moon, permitting the detection of fainter emissions from distant stars. He will talk about the properties of the Moon and its orbit, the advantages of a backside observatory, and the means by which a robotic observatory can be set up and maintained on the backside of the Moon. He will also talk about methods for sending data to Earth from the backside.

Bio:
Dr. Kayton has written about backside observatories for nearly ten years. He is an alumnus of Harvard, MIT, and Cooper Union. He specializes in vehicle electronics. He was Deputy Manager of Lunar Module Guidance and Control at NASA during Apollo. He has also worked as a system engineer on Spacelab, Space Shuttle, Space Tug avionics, and several aircraft, among many other projects. He is a Life Fellow of IEEE and winner of several engineering awards. He is retired from Kayton Engineering Company, a company he founded in 1981.

Schedule:
- 6:00 PM - Social and Networking
- 6:30 PM - Dinner
- 7:00 PM - Meeting and Presentation

Location:
Doubletree Club Hotel: 7 Hutton Centre Drive, Santa Ana, CA 92707

Cost:
- Dinner - $30
- Dinner (Student/Unemployed) - $20
- Presentation Only - Free

RSVP and Questions:
Dr. Padman Nagenthiram, Treasurer of IEEE OC-AESS
(padman.nagenthiram@gmail.com)

Submitting to the Newsletter

We publish the Lynx newsletter at the beginning of every month. Please provide any Orange County news, engineering conference details, expert views on engineering in Orange County, engineering articles, or engineering success stories to lynx@ieee-oc.org no later than the 15th, and we will publish the items in the following month's newsletter.

Thank You,
Lynx Editors

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