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 AESS Quarterly Email Blast

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Did You Know?

Did you know that AESS is on [LinkedIn](#) and [Facebook](#)? Please join us!

Did you know that National Aerospace Week is September 18-24, 2011. For more information, visit the [National Aerospace Week website](#).

Society News

AESS Elects New Board of Governors members

Congratulations to the following newly elected AESS Board of Governors members for the term 2011-2013:

Erik P. Blasch

Awards

Nominations for IEEE Medals and Recognitions

The IEEE Awards Program provides peer recognition to technical professionals whose exceptional achievements and outstanding contributions have made a lasting impact on technology, society, and the engineering profession.

The Aerospace and Electronics Systems Society members may be particularly interested in the following IEEE Medals and Recognitions, whose nomination deadlines are 1 July 2011. The awards typically consist of a medal, certificate and honorarium and are presented at the distinguished IEEE Honors Ceremony.

- **IEEE Medal of Honor**, for an exceptional contribution or an extraordinary career in the IEEE fields of interest.
- **IEEE Alexander Graham Bell Medal**, for exceptional contributions to the advancement of communications sciences and engineering.
- **IEEE Founders Medal**, for outstanding contributions in the leadership, planning, and administration of affairs of great value to the electrical and electronics engineering profession.
- **IEEE Dennis J. Picard Medal for Radar Technologies and Applications**, for outstanding accomplishments in advancing the fields of radar technologies and their applications.
- **IEEE/RSE (Royal Society of Edinburgh) Wolfson James Clerk Maxwell Award**, for groundbreaking contributions that have had an exceptional impact on the development of electronics and electrical engineering or related fields.
- **IEEE Jack S. Kilby Signal Processing Medal**, for outstanding achievements in signal processing.
- **IEEE Medal in Power Engineering**, for

Larry Chasteen

Mark E. Davis

George R. Dean

Robert L. Ewing

Alfonso Farina

Joseph R. Guerci

Peter K. Willett

Nomination Process for IEEE Fellow Class of 2012 is Now Open

The IEEE Fellows nomination process has begun! If you know an IEEE colleague who you think qualifies for IEEE's highest member grade of Fellow, it is time to start a nomination process! Nominations are due to IEEE by March 1, 2011.

Please visit the [IEEE Fellow Web page](#) for more information, detailed instructions for preparing the application, and required forms.

If you need any assistance in the process, you can contact [Bob Rassa](#), AESS Fellows Search Committee Chair.

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS BOARD OF DIRECTORS APPROVE MA-6 HISTORICAL MILESTONE

On November 29, 2010, Jim Leonard, Boeing/IEEE Company Focal, received the following email from Rob Coburn:

outstanding contributions to the technology associated with the generation, transmission, distribution, application and utilization of electric power for the betterment of society.

- **IEEE James H. Mulligan, Jr. Education Medal**, for a career of outstanding contributions to education in the fields of interest of IEEE.
- **IEEE Service Awards**
- **IEEE Corporate Recognition Awards**
- **IEEE Honorary Membership**

Awards presented by the IEEE Board of Directors fall into several categories: The Medal of Honor, Medals, Technical Field Awards, Corporate Recognitions, Service Awards, and Prize Papers. The IEEE also recognizes outstanding individuals through a special membership category: IEEE Honorary Member.

Nominations are initiated by members and the public, and then reviewed by a panel of peers. Their recommendations are submitted to the IEEE Awards Board prior to final approval by the IEEE Board of Directors.

For nomination guidelines and forms, visit the [IEEE website](#). Questions? Contact [IEEE Awards Activities](#), 445 Hoes Lane, Piscataway, NJ 08854 USA; tel.: +1 732 562 3844; fax: +1 732 981 9019..

Technical Operations

Do you want to become more involved in AESS? Join one of our 10 Technical Panels!

[Aerospace Control & Guidance Systems](#)

--[Gary Balas](#), Chair

[Aerospace Systems Integration Engineering](#)

--[M. Barry Greenberg](#), Chair

[Aerospace Workforce](#)

--[Russell Lefevre](#), Chair

[Cyber Security Panel](#)

--[Fred Wright](#), Chair

[Gyro & Accelerometer](#)

--[Randall Curey](#), Chair

I am pleased to inform you that the Institute of Electrical and Electronics Engineers (IEEE) Board of directors has approved the IEEE History Committee's recommendation that your nomination be approved as an IEEE Milestone in Electrical Engineering and Computing with the following citation:

Mercury Spacecraft MA-6, 1962

Col. John Glenn piloted the Mercury Friendship 7 spacecraft in the first United States human orbital flight on 20 February 1962. Electrical and electronic systems invented by McDonnell Aircraft engineers, including IRE members, made his and future spaceflights possible. Among the key contributions were navigation and control instruments, autopilot, rate stabilization and control, and fly-by-wire (FBW) systems. This was the culmination of an effort Leonard commenced in 2009 with his proposal #2009-12, Mercury Spacecraft MA-6, 1962, submitted to the IEEE History Committee. With help from Henry Brownlee, Jr., Boeing historian, and Bob Becnel, 2011 Chair of the St. Louis Section, in the updating and enhancing the proposal, this effort was successful.

The St. Louis Section funded the cost of the cast plaque with the above wording, and Leonard has received it from IEEE. Leonard is now working with Bob Becnel and Boeing to coordinate the dedication ceremony, tentatively scheduled for Friday, February 25, 2011. Location will be at the

[Radar Systems](#)

--[Michael Wicks](#), Chair

[SAR and IED Detection](#)

--[Mark Yeary](#), Chair

[Space Systems](#)

--[Cosimo Stallo](#), Chair

[Target Tracking Systems](#)

--[Hody Lambert](#), Chair

[Unmanned Aerial Vehicles](#)

--[George Dean](#), Chair

Target Tracking Systems Panel News

The Target Tracking Systems Panel is a Technical Panel of the IEEE Aerospace and Electronic Systems Society that aims to develop, maintain, and promote standards in the areas of target tracking, sensor management, and data fusion. To this end, the Target Tracking Systems Panel is divided into four Committees, with each Committee focusing on a different aspect of standardization. The Terminology Committee's objective is to produce a dictionary of standard terms; the Implementation Committee develops standards for target tracking systems architectures and component interfaces; the Test and Evaluation Committee develops standard methods for testing the performance of target tracking systems and algorithms; and the Technology Committee promotes Panel activities via arranging meetings and recognizing and awarding exceptional contributors.

The Target Tracking Systems Panel meets twice a year to review existing tasks and plan future activities. Panel meetings are typically held at technical conferences that are expected to be attended by IEEE Aerospace and Electronic Systems Society members. More information on activities of the Target Tracking Systems Panel as well as the Panel's bylaws can be found at the IEEE Aerospace and Electronic Systems Society's website under the Technical Operations link. IEEE members who wish to join in on Panel activities are encouraged to contact the Panel Chair, Hody Lambert.

The next Target Tracking Systems Panel meeting is scheduled to be held on Sunday, March 6, 2011 at the IEEE Aerospace Conference in Big Sky,

Boeing BDS Headquarters Building 100 in the Auditorium and Prologue Room. The next step is to invite Col. John Glenn, which is in process.

AESS Distinguished Lecture Program

The AESS Distinguished Lecture program continues to be well-received. This year, our speakers have made presentations in Ft.

Monmouth, NJ, Huntsville, AL, and London, UK.

Planned lectures for the rest of 2010 include:

- Israel Fred Daum on Nonlinear Filters
- Connecticut Theo Saunders on The Urgency of Systems Engineering Education
- India George Schmidt on Technology Trends for GPS and Inertial Systems
- Mexico Myron Kayton on The Evolution of Aircraft Avionics
- Tunisia Saj Durrani on Satellite Communications Systems

All AESS Chapters and IEEE Sections are encouraged to take advantage of the AESS Distinguished Lecturer and Tutorial Program for their regular or special meetings. See the [AESS web site](#) and look under the Education tab for further information.

AESS Field of Interest

The field of interest shall be the organization, systems engineering, design, development, integration, and operation of complex systems for space, air, ocean, or ground environments. These

Montana, USA. The exact time of the meeting will be announced in the conference schedule. More information on the 2011 IEEE Aerospace Conference can be found at aeroconf.org. Topics to be discussed at the meeting include, among others, efficient means to allow members to collaborate online, development of standard terms for the various renditions of the multiple-hypothesis tracking algorithm, and the refinement of the tracks-to-truths standard.

Chapter News

Student Chapters

There are currently three AESS Student Chapters 1) Missouri University of Science and Technology Student Chapter, Saint Louis Section lead by Professor Steve E Watkins, advisor 2) University of Kansas Student Chapter lead by Asst. Professor Shannon Blunt, advisor with Student Chapter Chair, Andisheh Ataollahi and 3) Ecole Nationale d'Ingenieurs de Sfax (ENIS) Student Chapter, Tunisia Section lead by Monji Kherallah with Student Chapter Chair Bilel Neji.

Please take time to encourage these student chapters and look for opportunities for new Student AESS Chapters.

A petition for a new AESS Student Chapter has been received from [Loris Marini](#), Student Branch Chair of the IEEE, University of Rome Tor Vergata. We encourage new Student AESS Chapters and interaction with local AESS Chapters and IEEE Sections to promote synergy and understanding of our developing fields of interest as shown on our [website](#)

Third AESS Chapter Summit

I am delighted that our AESS Board of Governors has approved holding the Third AESS Chapter Summit on August 18 at the Marriot Courtyard S.F. Downtown Hotel, 299 2nd St., immediately before the 2011 IEEE Sections Congress in San Francisco, CA. Reasonable travel expense including 3 hotel nights and airfare will be provided for one representative from each of our 54 active AESS Chapters throughout the world. We request that you contact your IEEE Section and Region for support since designated (voting) representatives may have travel expense budgets.

systems include but are not limited to navigation, avionics, mobile electric power and electronics, radar, sonar, telemetry, military, law-enforcement, automatic test, simulators, and command and control.

Job Opportunities

AESS wants to help connect job seekers with potential employers. Please submit job opportunities that would be of interest to our members to [Judy Scharmann](#). Please see the current postings on the [AESS Web Site](#).

Publications

IEEE AES Transactions “Letters”

Your AES Transactions will have a new category of submissions: the Letter. As with other Society’s published Letters, these are results that are of urgent interest. A Letter contains something that needs to appear very quickly: a contribution to a competitive and fast-moving subfield perhaps, or else a result that would be of immediate benefit to others if widely known.

The AES Transactions will offer thorough reviews with speedy decisions: our target turn-around time will be two months. We also promise that an accepted manuscript will be sent to the head of the publication queue. We anticipate that it will appear in the second-to-next

Please prepare for this opportunity to share your ideas with other Chapter Chairs and members of the AESS Board of Governors so that the AESS may engage our members in world class technology to serve our companies and countries represented.

Report Filing, 2011 budgets and Distinguished Lecturer Programs

January is the time to reflect on accomplishments and plan for 2011. Please work with your IEEE Section to provide inputs to the L50 financial report, file L31 meeting reports (note that rebates and awards are based upon these), prepare an activity budget, and file officer reports as required. Go to the [IEEE website](#) for further information.

Please contact [Iram J. Weinstein](#), VP Education, [James Howard](#), VP Member Services, or [Ron T. Ogan](#), Chair, Chapter Activities, for more information on how to invite a Distinguished Lecturer, or how to establish a new Chapter.

The average size of an AESS Chapter is 68 members but the Washington, Northern Virginia AESS Chapters is the largest with 425 members. AESS membership quality is our objective and your comments, suggestions and constructive complaints are welcome.

--[Ron Ogan](#)

Do You Qualify to be a IEEE Senior Member?

Senior Membership is the highest grade for which application may be made and shall require experience reflecting professional maturity; a candidate shall be an engineer, scientist, educator, technical executive, or originator in IEEE-designated fields in professional practice for at least ten years and shall have shown significant performance over a period of at least five of those years. An application for Senior Membership requires three references unless nominated by a Senior Member, and in that case requires two references.

Ten years of professional experience

Your educational experience is credited toward that time as follows:

- 3 years for a baccalaureate degree in an IEEE-designated field;
- 4 years if you hold a baccalaureate and masters

Transactions issue: in fewer than six months.

The requirements on an author are as follows. A Letter must be short, no more than 4 pages long as published. It must be submitted in single-spaced/double-column format so that we can check this. It must fit the requirements for a Letter, specifically that its expeditious publication be demonstrably important. The author must understand that there is no stage of revision: the manuscript will be either accepted as is, or else rejected – this means that the development must be clear and the language without flaw.

--Peter Willett, EIC
Transactions on AES.

Systems Magazine Archives

Did you know that we have Systems Magazine Archives on the AESS web site? Click [here](#).

AESS Web Site

Our web site is updated on a daily basis. This is the place to go for the most up-to-date information on society activities, conferences, publications, educational activities, technical operations, membership, student activities, etc.

www.ieee-aess.org

Conference Info

degree;
• 5 years if you hold a doctorate.

Five years of significant performance

- Substantial engineering, responsibility or achievement.
- Publication of engineering or scientific papers, books, or inventions.
- Technical direction or management of important scientific or engineering work with evidence of accomplishment.
- Recognized contributions to the welfare of the scientific or engineering profession.
- Development or furtherance of important scientific or engineering courses that fall within the IEEE designated fields of interest.
- Contributions equivalent to those of the above in such areas as technical editing, patent prosecution or patent law, provided these contributions serve to advance progress substantially in IEEE designated fields.

Benefits of Senior Membership

- Recognition: The professional recognition of your peers for technical and professional excellence.
- Senior Member Plaque: Since January 1999, all newly elevated senior members have received an engraved Senior Member plaque to be proudly displayed for colleagues, clients and employers to see. The plaque, an attractive fine wood with bronze engraving, is sent within six to eight weeks after elevation.
- US\$25 Coupon: IEEE will recognize all newly elevated senior members with a coupon worth up to US\$25. This coupon can be used to join one new IEEE society. The coupon expires on 31 December of the year in which it is received.
- Letter of Commendation: A letter of commendation will be sent to your employer on the achievement of senior member grade (upon the request of the newly elected senior member).
- Announcements: Announcement of elevation can be made in section/society and/or local newsletters, newspapers and notices.
- Leadership Eligibility: Senior members are eligible to hold executive IEEE volunteer positions.
- Ability to Refer Other Candidates: Senior members can serve as a reference for other applicants for senior membership.
- Review Panel: Senior members are invited to be on the panel to review senior member applications.

Please go to the [AESS Web Site](#) to see a list of upcoming conferences.

Student Info

Student members of AESS:

Do you need an experienced AESS member to help you with resume writing? Or maybe help you with understanding what the "real world" in electrical engineering in industry is all about?

Perhaps you have an idea for a new Student Chapter of AESS at your university?

Or maybe you have feedback on what AESS can, or should, do to better provide more content or help for its student members?

We may be able to help! Just contact [Bob Rassa](#) or [Jim Leonard](#) and tell us!

To submit new articles, please send an email with your article to [Judy Scharmann](#), subject line: "Quarterly Email Blast Article Submission". The next publication will be in April, 2011, deadline for submission is March 15, 2011.