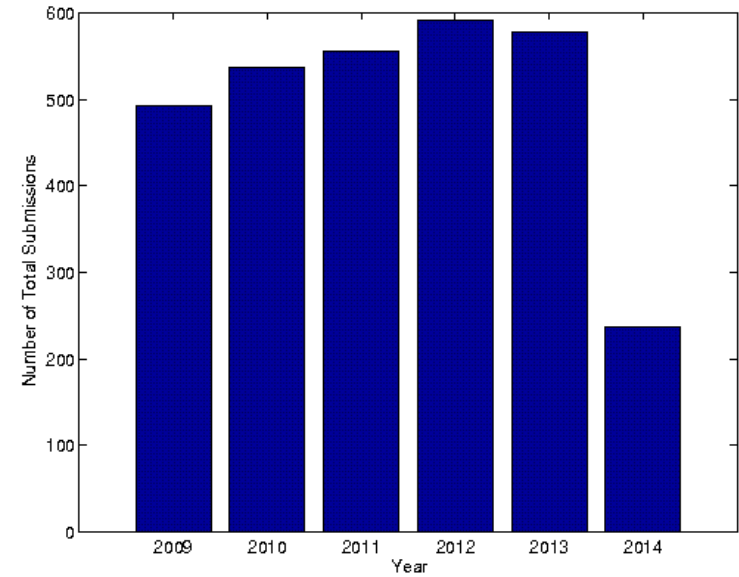
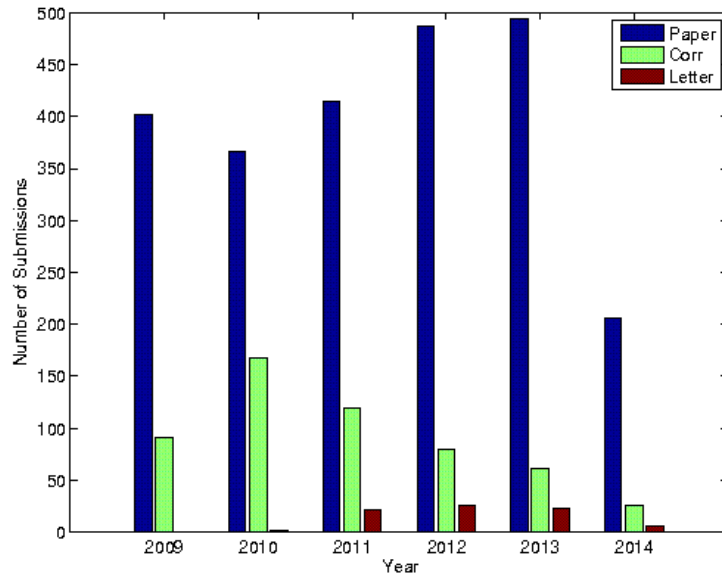


# **Status of the IEEE Transactions on Aerospace and Electronic Systems**

**Lance Kaplan, Editor-In-Chief**

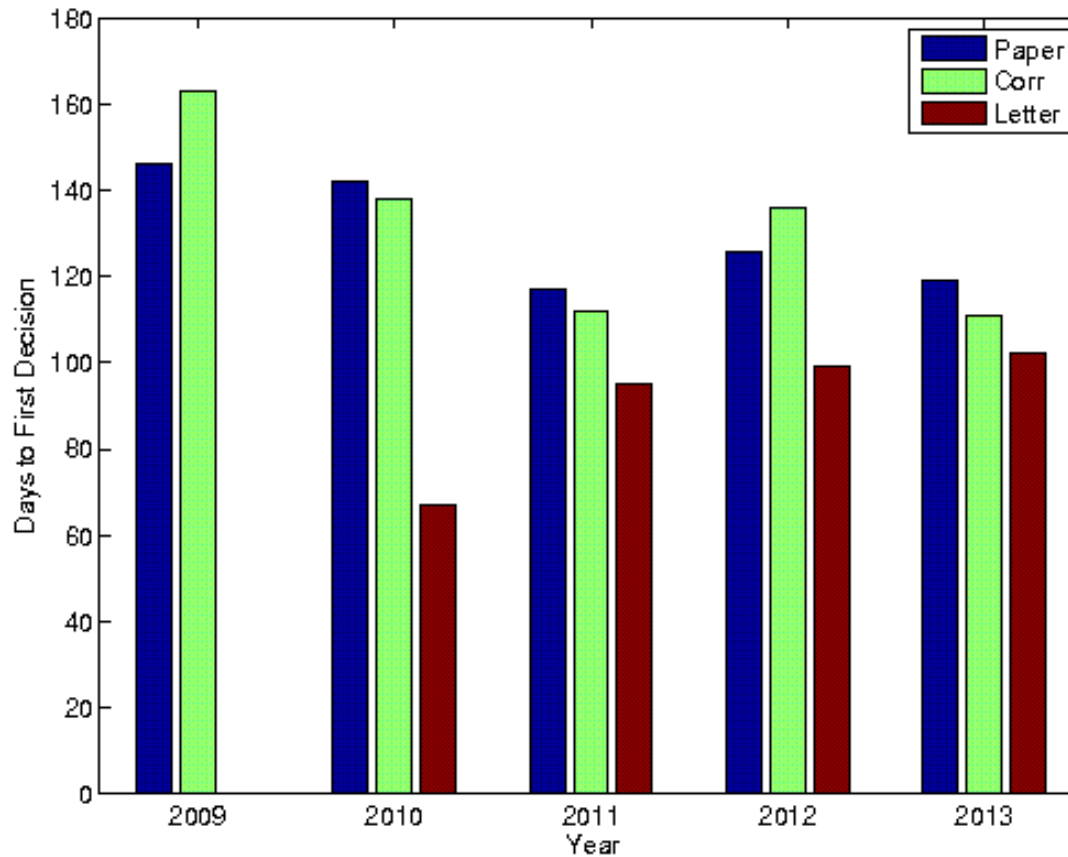
**May 22, 2014**

# Number of Submissions





# Time to First Decisions



# Final Decision

	<b>2009</b>	<b>2019</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Accepts	178	192	191	174	223
Rejects	269	288	343	300	302
Acceptance Rate	40%	40%	36%	37%	42%

# Quality

	2008	2009	2010	2011	2012
No. Articles	128	126	126	218	257
Impact Factor	1.024	1.230	0.917	1.095	1.299
5 Year Impact Factor	1.757	1.776	1.603	1.680	1.767
Immediacy Index	0.109	0.095	0.140	0.151	0.214

2012 Rankings (Engineering, Aerospace):

Impact Factor: #4  
5-year IF: #3  
Immediacy Index: #11

Source: Thomson Reuters *Journal Citation Report*

# IEEE Policy News

- IEEE Xplore
  - New metadata requirements for preprints and articles
  - Delays in posting on IEEE Xplore
    - January issue appeared May 2
    - April issue expected to post by mid-June
    - Delays should disappear by 2015
  - Working on workflow for rapid posting on Xplore

# Other Issues

- Paper Format
  - Justified format is currently under investigation
- 2011 Barry Carlton Award
  - Short list be reviewed by senior editorial staff
  - Accepting nominations for 2012 award
- Potential idea - IEEE T-AES Blog
  - Has not been implemented yet
  - Only IEEE AESS members can comment about papers
  - The world can see the comments
  - Is this feasible?



# PRAC

- Associate Editors
  - Term limits
  - Diversity

Sector	2009	2014
Academia	32 (78%)	44 (75%)
Government/Industry	9 (22%)	15 (25%)

- Letter to the Editors
- Submission to Publication Time

# Special Section: CS Applied to Radar

16 papers  
(one published in October 2013)

## Guest Editors:

Dr. Joachim H.G. Ender  
Dr. Holger Rauhut  
Prof. Gilda Schirinzi  
Prof. Thomas Strohmer  
Prof. Peter Willett

IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS

**IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS**

APRIL 2014 VOLUME 50 NUMBER 2 ISSN 0018-9251

A QUARTERLY PUBLICATION OF THE IEEE AEROSPACE AND ELECTRONIC SYSTEMS SOCIETY

*Guest Editorial:*  
Foreword to the Special Section on Compressive Sensing Applied to Radar . . . M. Weigl, J. Ender, H. Rauhut, G. Schirinzi, T. Strohmer & P. Willett 807

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Volume 50, No. 2, April 2014

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  - Tod Luginbuhl (Target Tracking and Multisensor Systems AE)
  - Daniele Mortari (Space Systems AE)
- New Appointees
  - Michael Rice (Associate EiC)
  - Phillip Pace (Electronic Warfare Systems TE)
  - Antonios Tsourdos (Guidance and Control Systems AE)
  - Simon Maskell (Target Tracking and Multisensor Systems AE)
  - Vincenzo Matta (Target Tracking and Multisensor Systems AE)
  - Shozo Mori (Target Tracking and Multisensor Systems AE)
  - Felix Govaers (Target Tracking and Multisensor Systems AE)

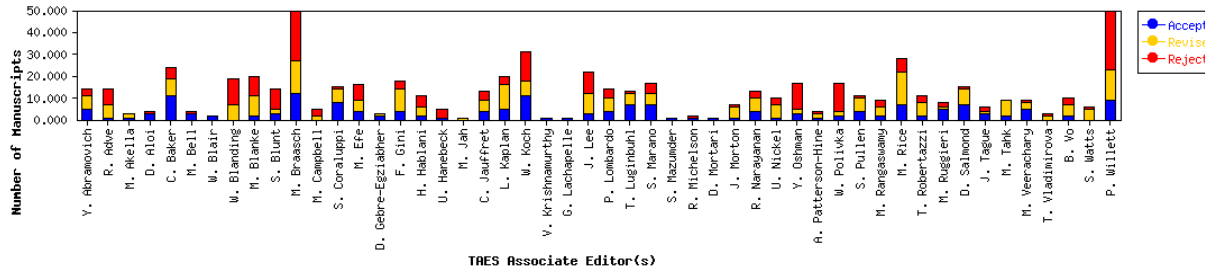


# AE Performance (Cont)

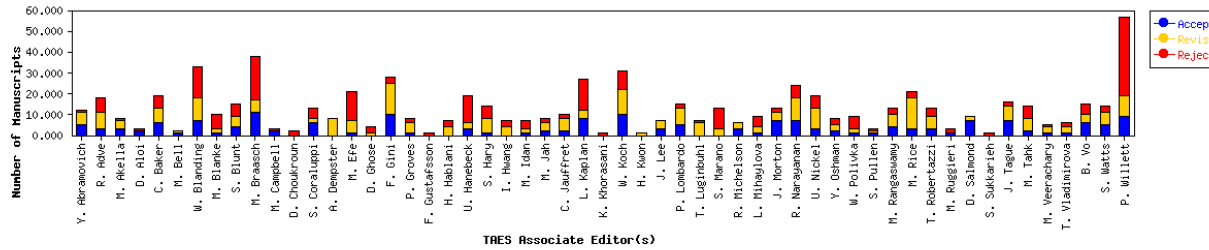
Name	Time to first report (days)			Final disposition of papers reaching first report					Total	Acceptance Rate (%)
	Average	Max	Min	Accept	Reject	Decision to Revise	Withdrawn	No Decision		
Li, Junfeng	74	91	48	4	2	4	0	2	8	67
Lombardo, Pierfrancesco	211	354	95	3	1	6	0	7	11	75
Luginbuhl, Tod	289	423	212	3	0	3	0	0	3	100
Marano, Stefano	107	167	76	7	1	14	0	3	11	88
Maskell, Simon	0	0	0	0	0	0	0	5	5	0
Matta, Vincenzo	0	0	0	0	0	0	0	3	3	0
Mazumder, Sudip	295	295	295	0	0	0	0	1	1	0
Michelson, Robert	0	0	0	0	0	0	0	0	0	0
Mihaylova, Lyudmila	118	177	68	8	5	10	0	6	19	62
Mori, Shozo	0	0	0	0	0	0	0	0	0	0
Mortari, Daniele	96	161	53	2	3	3	0	0	5	40
Morton, Jade	166	332	4	4	6	8	0	6	16	40
Nakasuka, Shinichi	272	396	193	2	0	2	0	3	5	100
Narayanan, Ram	91	129	64	5	3	4	0	3	11	63
Nickel, Ulrich	147	214	91	7	1	1	0	0	8	88
Pace, Phillip	89	89	89	0	0	1	0	5	5	0
Patterson-Hine, Ann	0	0	0	0	0	0	0	0	0	0
Polivka, William	13	156	0	1	11	2	0	1	13	8
Pullen, Sam	0	0	0	1	0	1	0	0	1	100
Rangaswamy, Muralidhar	102	176	0	1	2	3	0	1	4	33
Rice, Michael	103	313	1	3	6	8	0	4	13	33
Robertazzi, Thomas	108	178	0	5	2	9	0	7	14	71
Rodrigues, Luis	183	268	107	0	2	2	0	3	5	0
Ruggieri, Marina	0	0	0	0	0	0	0	0	0	0
Saleh, Joseph	22	34	5	2	1	3	0	3	6	67
Salmond, David	0	0	0	0	0	0	0	0	0	0
San Antonio, Geoffrey	122	174	28	0	2	2	0	7	9	0
Tague, John	52	77	4	3	0	1	0	1	4	100
Tahk, Min-Jea	106	247	0	2	5	3	0	3	10	29
Tsourdos, Antonios	0	0	0	0	0	0	0	5	5	0
Veerachary, Mummadi	78	78	78	1	0	1	0	2	3	100
Vladimirova, Tanya	80	80	80	4	1	3	0	3	8	80
Vo, Ba-Ngu	107	159	63	0	2	3	0	7	9	0
Watts, Simon	132	204	39	6	3	9	0	6	15	67
Willett, Peter	0	0	0	0	0	0	0	0	0	0
Wong, Kainam Thomas	97	194	63	3	9	3	0	6	18	25
Yu, Kegen	106	191	17	2	11	7	0	7	20	15

# AE Report Card

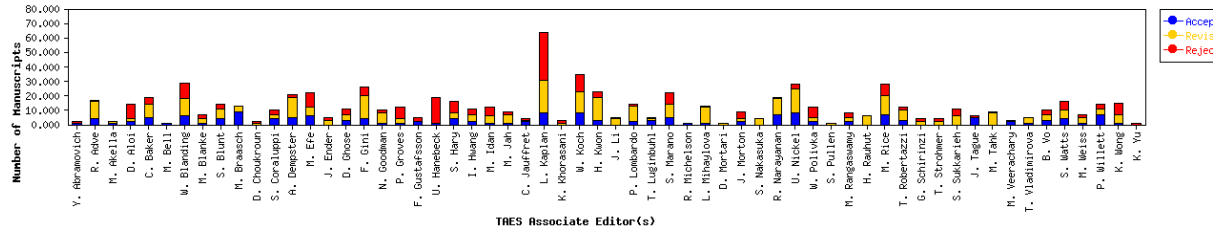
Dates: 4/1/2010 to 3/31/2011



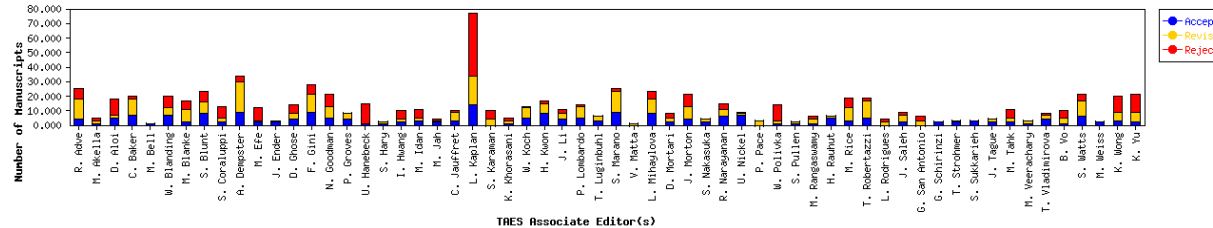
Dates: 4/1/2011 to 3/31/2012



Dates: 4/1/2012 to 3/31/2013



Dates: 4/1/2013 to 5/31/2014





## **AESS Quarterly Email Blast (QEB)**

**Editor: William P. Walsh**

**Executive Assistant: Judy Scharmann**

Currently, the AESS QEB has been published 4 times per year and it is sent to AESS people by email on the first day of:

1. January
2. April
3. July
4. October

### **CONTENT**

The QEB content consists of:

1. President's Message
2. Society News
3. Conferences
4. Education
  - a. EVTS
  - b. Distinguished Lecturer Program
  - c. GOLD for GOLD Lecturers
5. Industry Relations
6. Membership
  - a. Awards
  - b. Chapter News
  - c. Student Activities
7. Publications
  - a. Systems Magazine
  - b. Transactions
  - c. Tutorials
  - d. Website
8. Technical Operations



## PUBLICATION CYCLE

**1<sup>st</sup> day of January, April, July, and October – the QEB will be published;**

**January 2 – March 15; April 2 – June 15; July 2 – September 15; October 2 – December 15**  
– Editor will solicit articles for publication. As articles are submitted, they will be edited and formatted.

**March 15, June 15, September 15, December 15** – The editor will send all edited final articles to Executive Assistant for inclusion in the QEB.

**March 28, June 28, September 28 and December 28** –The finished product will be sent to the Editor for final approval.

## AIMS

- QEB is a fundamental tool to promote AESS among the youngest people (Student members, GOLD ones);
- In the scenario of different levels of membership, QEB is inserted in the basic version: in this way, people can have a VISION of AESS society;
- QEB is useful to anticipate the new articles to be published in the System Magazine;
- QEB is a useful tool to promote the GOLD and student activities;
- QEB promotes IEEE AESS Workshops and Conferences and to inform about open positions in Industry or Academy.

## Notes

- Bill Walsh appointed Editor-In-Chief for QEB in January 2014
- Objective to provide links to articles and other items as part of a true electronic newsletter.
- Will tie into Systems Magazine News and Information.
- Interested in making QEB accessible through social networking.



## QEB ISSUES

- **April 2014 (Upcoming!)**
- **January 2014**
- **October 2013**
- **July 2013**
- **April 2013**
- **January, 2013**
- **October, 2012**
- **July, 2012**
- **April, 2012**
- **January, 2012**
- **October, 2011**
- **July, 2011**
- **April, 2011**
- **January, 2011**
- **October, 2010**
- **July, 2010**
- **April, 2010**
- **January, 2010**
- **October, 2009**

# IEEE AESS Magazine

Spring AESS Board of Governors Meeting

Cincinnati, OH

May 22, 2014

# Magazine Publication Leadership

## Editors

Editor-in-Chief—*Teresa L. Pace*  
Associate Editor-in-Chief—*W. Dale Blair*  
Associate Editor-in-Chief—*Maria Greco*  
Administrative Editor—*William P. Walsh*  
Ass't. Admin. Editor—*Susanne J. Walsh*  
Editorial Consultant—*David B. Dobson*  
VP Publications—*Peter K. Willett*  
AESS President—*Robert P. Lyons, Jr.*  
Executive Assistant, AESS  
—*Judy Scharmann*

## Contributing Editors

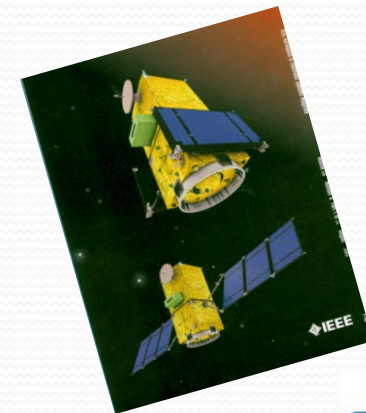
Awards—*Erwin C. Gangl*  
Book Reviews Editor—*Darin Dunham*  
Conferences—*Iram Weinstein*  
Distinguished Lecturers &  
Tutorials—*Giuseppe A. Fabrizio*  
Education—*Giuseppe A. Fabrizio*  
History—*James Leonard*  
Standards—*Richard Hochberg*  
Student Research—*Richard Coogle,*  
*John Glass*  
Technical Panels—*Roger Oliva*  
Tutorials Editor—*Braham Hamed*  
Website Updates—*Judy Scharmann*

## Associate Editors and Areas of Specialty

Scott Bawden—*Maritime, Energy, Position, Navigation, Timing*  
Erik Blasch—*Recognition, Tracking, Sensor & Assessments*  
Shirley Cheng—*Guidance, Distributed Sensors, Fusion, Biometric*  
David Crouse—*Sensors, Electro-Optics, Radar*  
Mauro De Sanctis—*Space Communications and Electronics*  
Carles Fernandez-Prades—*Position, Navigation, Timing*  
Maria Greco—*Clutter Models, Radar, Signal Processing, Radar Systems*  
Moriba Jah—*Astronautics, aeronautics*  
Haiying Liu—*Fusion, Image Processing, Tracking*  
Ruhai Wang—*Systems Engineering*  
Peter Willett—*Tracking, Fusion, Signal Processing*

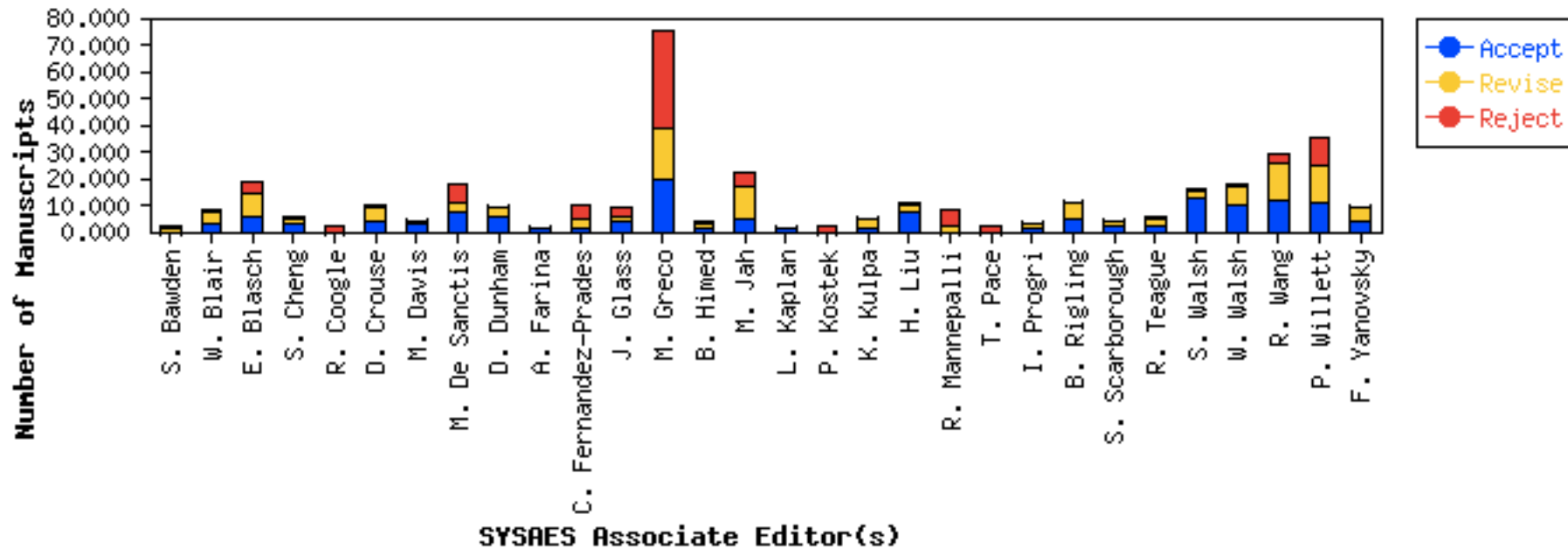
# Magazine Highlights

- July 2013 - Special Issue on Standards
  - Guest Editors: Dale Blair and Bill Walsh
  - 6 articles
  - Coincides with 30<sup>th</sup> Anniversary of IEEE 802 family of standards (ethernet, wireless, etc)
- First history interview article in progress
  - Interviewed- Dave Dobson
  - Author - Dale Blair
  - Interview held and recorded on video, April 2013 (issue with sound)
  - Need to re-do, in process
- History article in progress  
“Beyond the Compass -- How Electronics Advanced Air Navigation”
  - Author Ron Schroer – Past EIC and Current Editor
  - Review returned, waiting for revision
- January 2014 - Special Issue on Wide Area and Staring SAR Radars
  - Guest Editors: Brian Rigling and Steven Scarborough
  - 6 articles, longer than normal issue (64 versus 48 pages)
- Summer 2014 –Special Issue on Signal Processing for Remote Sensing
  - Guest Editors: Krzysztof Kulpa, Felix Yanovsky
  - Final paper has been approved, ready to go now
- Early 2015 – Special Issue on Avionics Systems
  - Direct response from Linked In discussion – our societies / readers’ inputs incorporated
  - Guest Editors: Paul Kostek, William Walsh
  - 4+ papers submitted and being reviewed, first round still
- Upcoming student mentoring article “Engineering in High School”
  - Author Bob Rassa, IEEE-AESS Sr. Past president
  - In process, nearly complete



# Associate Editor Metrics

Dates: 4/1/2012 to 3/31/2014



These are our current Associate Editors.

This report reflects the timeliness of the editorial process by associate editor.

<u>Name *</u>	<u>Avg days to review</u>	<u>% Reviews on Time</u>	<u>Reviews completed</u>	<u>Reviews pending</u>	<u>Invites</u>
<a href="#">Bawden, Scott</a>	43	50	2	1	3
<a href="#">Blair, William</a>	108	25	8	2	10
<a href="#">Blasch, Erik</a>	77	35	20	2	22
<a href="#">Cheng, Shirley</a>	90	42	7	1	7
<a href="#">Coogle, Richard</a>	0	0	2	0	2
<a href="#">Crouse, David</a>	64	60	10	0	11
<a href="#">Davis, Mark</a>	34	0	6	1	7
<a href="#">De Sanctis, Mauro</a>	112	22	22	2	20
<a href="#">Dunham, Darin</a>	77	54	11	2	11
<a href="#">Fernandez-Prades, Carles</a>	107	50	10	1	11
<a href="#">Glass, John</a>	28	55	9	0	9
<a href="#">Greco, Maria</a>	52	40	85	4	79
<a href="#">Himed, Braham</a>	149	50	4	0	6
<a href="#">Jah, Moriba</a>	76	60	15	2	24
<a href="#">Kaplan, Lance</a>	75	0	2	0	1
<a href="#">Kostek, Paul</a>	74	50	2	1	3
<a href="#">Kulpa, Krzysztof</a>	71	75	4	0	6
<a href="#">Liu, Haiying</a>	144	27	18	0	12
<a href="#">Pace, Teresa</a>	0	0	2	0	2
<a href="#">Rigling, Brian</a>	57	63	11	0	11
<a href="#">Scarborough, Steven</a>	42	25	4	0	5
<a href="#">Walsh, Susanne</a>	15	20	15	0	16
<a href="#">Walsh, William</a>	63	37	16	0	19
<a href="#">Wang, Ruhai</a>	51	54	33	0	29
<a href="#">Weinstein, Iram</a>			0	0	0
<a href="#">Willett, Peter</a>	43	37	37	0	36
<a href="#">Yanovsky, Felix</a>	60	44	9	0	9
Avg	65.8	37	13.5	0.7	13.7
St Dev	37.7	21	17.0	1.0	15.8

# Harry Mimno Award

**Award Winner – 2011** Regular Paper

**“A Low Cost Flight Simulator Using Virtual Reality Tools”**

Ilkay Yavrucek, Eser Kubali and Onur Tamarici (Middle East Tech. Univ.)

April 2011, Vol. 26 No. 4, pp. 10-14

*Typically awards are selected and awarded at least a year or possibly two after they appear in the magazine so that there is time to determine their impact to society in general. Citations are an important indicator of this.*

*Your input and nominations for 2012 will be gratefully accepted.*

## From scopus.com – more selective than google scholar – the most cited:

<input type="checkbox"/>	High level information fusion (HLIF): Survey of models, issues, and grand challenges 1	Blasch, E.P., Lambert, D.A., Valin, P., (...), Chong, C., Shahbazian, E.	2012	IEEE Aerospace and Electronic Systems Magazine	11
<a href="#">UConn Links</a>					
<input type="checkbox"/>	Seamless networking for aeronautical communications: One major aspect of the SANDRA 2 concept	Plass, S.	2012	IEEE Aerospace and Electronic Systems Magazine	10
<a href="#">UConn Links</a>					
<input type="checkbox"/>	Small infrared target detection using sparse ring representation 3	Gao, C., Zhang, T., Li, Q.	2012	IEEE Aerospace and Electronic Systems Magazine	7
<a href="#">UConn Links</a>					
<input type="checkbox"/>	A multi-frequency hybrid passive radar concept for medium range air surveillance 4	O'Hagan, D.W., Kuschel, H., Ummerhofer, M., Heckenbach, J., Schell, J.	2012	IEEE Aerospace and Electronic Systems Magazine	6
<a href="#">UConn Links</a>					
<input type="checkbox"/>	Demonstration of closed-loop airborne sense-and-avoid using machine vision 5	Mejias, L., Lai, J., Ford, J.J., O'Shea, P.	2012	IEEE Aerospace and Electronic Systems Magazine	6
<a href="#">UConn Links</a>					
<input type="checkbox"/>	A new approach to designing electronic systems for operation in extreme environments: Part 6 i-The SiGe Remote Sensor Interface	Diestelhorst, R.M., England, T.D., Berger, R., (...), Eckert, C., Cressler, J.D.	2012	IEEE Aerospace and Electronic Systems Magazine	4
<a href="#">UConn Links</a>					



#### Editors

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VP Publications—*Peter K. Willett*  
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## An example of a Table of Contents

## From the Editor-in-Chief DECEMBER 2013



Teresa Pace

As our year comes to a close, I want to thank everyone who has made this year an outstanding success. Everyone on our editorial board along with our publisher Allen Press has worked continuously to improve the quality of each issue as well as ensure the content you are reading is relevant and interesting. To our readers, I thank you for your dedication and interest in the magazine. You are the reason we do this. In addition to our publications (our *SYSTEMS Magazine*, Tutorials, and the *Transactions*), the society has a Board of Governors (BoG) comprised of volunteers who are voted in and whose job it is to oversee and manage the society to best serve our AESS members. There is always an IEEE Aerospace and Electronic Systems Society Organization listed near the back of the magazine for the current year which includes the names of the BoG members. The Board of Governors comes together twice a year, once in the Spring and once in the Fall, to review our society's status, existing and new initiatives, conferences, publications, and finances (just to name a few). In order to give you some insight into who is leading the society you belong to, I've included a photo below (this editorial to show you the diversity we have in your governing representation. We have international members from academia as well as industry who each bring a unique and valuable perspective to our society. Thank you to our BoG this year for once

again doing an outstanding job. I hope that everyone had a fruitful 2013 as we look forward to 2014 with enthusiasm and excitement. Enjoy your holidays!

—Teresa Pace, EIC



Photo 1.

The AESS Board of Governors held their Fall 2013 meeting in Orlando, Florida on October 4-5, 2013. Pictured left to right: Peter Willett, Dale Blair, Wolfgang Koch, Teresa Pace, Judy Scharmann, Erik Blasch, Marina Ruggieri, Leo Lighthart, Hugh Griffiths, Jim Leonard, Bob Lyons, Maria Sabrina Greco, Joe Guerci, Rob Ewing, and Ron Ogan. Board of Governors not pictured include: Larry Chasteen, Mark Davis, George Dean, Alfonso Farina, Yuri Abramovich, Walter Downing, Giuseppe Fabrizio, Lance Kaplan, Kathleen Kramer, Roger Oliva, George Schmidt, and Iram Weinstein.



Photo 2.

Our President, Hugh Griffiths, was recognized by the Board and presented with a gift and a plaque, to thank him for serving as President of AESS. The plaque was presented by Junior Past President, Marina Ruggieri.

Teresa is always very good about writing an editorial for each monthly issue. Not easy.

## Student Research Highlight Leveraging the Technology Investments of the Past

Tina P. Srivastava  
Massachusetts Institute of Technology

### PROBLEM OF INTEREST

Technology-based systems that were developed decades ago, from the Internet to aircraft, continue to be in use across industries. Considering the investment made, it is essential to maintain these systems. The maintenance of systems that are in use is termed "servicing existing systems."

For example, Walmart and Amazon have had information technology systems in use for years that help them interact with their customers and their supply chains. Keeping these systems up-to-date by servicing them is critical to maintaining a competitive advantage. This same principle applies to software systems such as Web-based email and smartphone operating systems.

The need to service existing systems is not exclusive to software companies and retailers. Due to the economic climate, more resources have been put toward life extension of expensive physical systems. Currently, servicing existing systems accounts for 70% of U.S. Department of Defense (DoD) weapon systems' total life cycle cost [1].

As a part of servicing, frequent software updates supporting existing platforms are deployed. Movement to the cloud can be interpreted as a means of centralizing the task of servicing existing systems.

Despite industry shifts toward servicing existing systems, such as the movement to the cloud, and the economic incentive for servicing existing systems, as evidenced by the DoD budget, many organizations still struggle to transform their organizations to capture the value associated with servicing existing systems.

### PAST RESEARCH AND CURRENT STATE

Two primary bodies of knowledge are leveraged in the current paper. The first is the International Council on Systems Engineering (INCOSE) *Systems Engineering Handbook* which

Author's current address: Engineering Systems, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139, USA. E-mail: (tinap@alum.mit.edu). Manuscript SYSAES 12-0227; DOI: No. 10.1109/MAES.2014.120227; received December 10, 2012; revised August 12, 2013; and ready for publication October 21, 2013. Review handled by J. Class. 0885/9895/14/\$26.00 © 2014 IEEE.

details a generic system life cycle and the associated processes and activities for systems engineers in each life cycle phase [2]. The life cycle is primarily described for new systems; however, groups including the In-Service Systems Working Group (ISSWG) are developing tools for servicing existing systems.

The second is the Massachusetts Institute of Technology (MIT) Lean Advancement Initiative's enterprise self-assessment tool (LESAT). This tool is used by many enterprises to assess the enterprise's strengths, areas of improvement, and readiness to change. LESAT has been designed for enterprises that offer products only, not services.

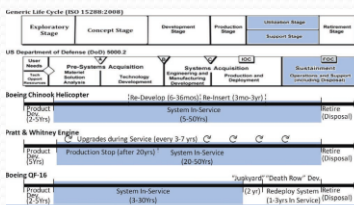
In this paper, an extension of LESAT for servicing existing systems is proposed: the lean effectiveness model for products and services. Collaborations with INCOSE ISSWG and three aerospace and technology enterprises (Boeing, Pratt & Whitney, and Raytheon), as well as review of the literature, are used in capturing best practices for success in servicing existing systems.

### STUDENT CONTRIBUTIONS

Through in-depth case studies in the aerospace industry, Srivastava discovered that the first instantiations of a system are often in service while future instantiations are undergoing the development and production stages of the system life cycle [3], [4]. Therefore, processes related to servicing existing systems must be in place early in the system life cycle. Also, the number of years that systems remain in service can reach up to 90% of the system's entire lifetime. Therefore, state-of-the-art models of system life cycles can be confusing in that they represent the portion of the system life cycle in which servicing existing systems takes place as a relatively small fraction, as shown in Figure 1.

The best practices developed were tested against corner cases, such as the Boeing QF-16 program, which refurbished F-16s built in 1976, some of which had sat idle in junkyards for years. In 2012, the QF-16 program redeployed these aircraft as target drones for the U.S. Air Force QF-16 Air Superiority Target program. This highlights an extreme in life extension, with acute challenges in configuration management and rebuilding supplier relationships.

Servicing existing systems poses unique challenges to organizations, which increases the need to identify best practices and when to use them. Some of these challenges



**Figure 1.** The generic system life cycle and DoD life cycle compared to three real system case studies. The portion of the life cycle allocated to servicing existing systems is in blue. The figure is an abstract and does not represent a real world system or system at INCOSE, Raytheon, Pratt & Whitney, and Boeing.

include lack of documentation of system configuration, obsolescence of parts, compatibility with legacy technology, and lack of knowledge transfer between the engineers that designed the system and the workers repairing it. In addition, the variety of terminology associated with the term "servicing existing systems," including "sustainment" and "maintenance," leads to confusion in identifying and leveraging best practices from the industry and even best practices within an organization.

Another challenge is the employee perception of servicing existing systems. Since many product-focused businesses have yet to realize the potential revenue and innovation in services, employees complain of lower compensation and recognition.

Furthermore, success in servicing existing systems often requires cross-functional collaboration. One example is that economies of scale can be realized if a buyer purchases spares for repairs at the same time as parts are purchased for original system production. Purchases at the time of production also avoid issues of obsolescence. However, many product-focused organizations do not have the contracts or financial

systems in place to enable these purchases at the time of production and thus to potentially realize significant cost savings, the servicing existing systems.

The current research network existing tools, including LESAT and the System Engineering Handbook [2], to help enterprises be proactive rather than reactive in learning servicing existing systems into a competitive advantage. It proposes developing questions and metrics to indicate an enterprise's efficiency and effectiveness at servicing existing systems. The proposed lean effectiveness model is organized into recommendations for enterprise transformation and leadership, life cycle processes, and enabling infrastructure. Some example diagnostic questions are as follows:

- Does the servicing existing systems organization participate in the design and requirements development processes? Does it have approval rights on the design or just an input role?
  - Do program metrics include customer satisfaction surveys and repeat business tracking?
  - Do servicing existing systems engineers provide design input to research and development engineers, and vice versa?
  - Does the employee career path in servicing existing systems attract and retain top talent?
  - Do engineers have an in-depth understanding of the supply chain architecture and maintenance operations that the customer is using in order to design field repair approaches?
- This work focuses on servicing existing systems in aerospace and technology. The next step is to extend the model to businesses without inventory. ♣

### Student Research Highlight

#### REFERENCES

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#### BIOGRAPHY

Tina P. Srivastava is a graduate student in the MIT System Design and Management (SDM) program, working with Professor Deborah Nightingale. SDM is a joint program between the MIT School of Engineering and Sloan School of Management to educate midcareer professionals to solve large-scale, complex challenges with a holistic systems ap-



proach and a global mindset. Srivastava's research was selected for presentation at the INCOSE International Symposium in Rome, Italy, in July 2012. Srivastava has held senior systems engineering roles across the aerospace, national security, and commercial sectors. While completing her bachelor's of science in aeronautics and astronautics engineering at MIT, Srivastava was program manager of a 40-student team to design,

build, and flight test a low-Earth-orbit satellite. Srivastava led efforts for and tested the satellite in a zero-gravity parabolic flight. She was recognized for her work with the Lockheed Martin Prize for Excellence in Systems Engineering. Srivastava volunteers as mentor and head referee of annual middle and high school student robotics competitions (Boosting Engineering, Science and Technology and For the Inspiration and Recognition of Science and Technology organizations). She has been an invited speaker at the Amelia Earhart events encouraging young women to pursue careers in engineering, science, and aviation. Srivastava is a licensed private pilot and enjoys scuba diving, skydiving, sailing, rock climbing, and painting.

Example of Student Highlight, from February 2014. These would seem to be a high-impact way to connect with our members.

## STUDENT ACTIVITY HIGHLIGHT Engineering in High School

Bob Rassa  
IEEE-AESS Treasurer and Past President  
Fallston, Maryland USA

The world has advanced dramatically in the last century, with exceptional advances in electronics evident during the past several decades. This advancement has been made possible by brilliant engineers, designers and inventors around the world whose interest and passion for engineering and science have driven them to do great things. We are grateful to them for adopting engineering as a career and for devoting

their life to benefit humanity with their creations and inventions, and while there are often monetary rewards for their work, the rest of us are the real beneficiaries in that we have new devices and machines that help make life more comfortable, sustainable, and enjoyable as well.

We surely need to keep up the pipeline of engineers in our colleges and universities. What, one wonders, are the motivators that cause the world's young people to choose their career to choose engineering, for example? Often, it is family or friends, or personal experiences, or just natural gravitation towards the field that precipitates the career choice. When does this initial career choice occur? How can we help influence more of our young students to give engineering a try? Many focus on engineering as a career path when students enter college, but others maintain, including the author, that this is a bit on the late side. Most students will demonstrate an inclination

towards an engineering/science vs. liberal arts and other fields in high school, and often earlier. Unfortunately, competent or adequate career counseling may not be available to many students at such a young age.

The Aerospace & Electronic Systems Society has been providing some educational support to a few major colleges and universities for special engineering projects for many years, and several years ago determined that perhaps providing some engineering support money to high schools might help interest students in this career path. The first one selected was Loyola Blakefield, in Towson Maryland, as it is one of the premier college preparatory schools in the area, with a consistent 100% matriculation rate. A small donation was made to assist in starting



Photo 1: Mr. Brady Stonestfer, Joseph Thompson, Sam Dunsieith, Kristopher Szabo, Christopher Lieberman.

an Introduction to Engineering Program option for seniors (12<sup>th</sup> graders), and the program was initiated in fall of 2011 with the designation of a civil engineering graduate of Lehigh University Greg Koffel, as the primary teacher. Mr. Koffel was on the Loyola staff as a mathematics teacher and his degree in civil engineering made him a logical candidate for the assignment. The author assists Greg by providing four to six weeks of electronics instruction during the school year, and also provides an overview as to the type of career path that is available to engineers. Photo 1 shows the 2014 Loyola Blakefield Introduction to Engineering students.

The program just completed its 2013 class, and 32 of the 180 senior students signed up for the course. The students are given engineering projects to solve or complete in several engineering fields. In the civil engineering field, they are asked to design a golf course, and are given several months to complete the design. In the electronics field, the students are taught how to solder, hand-solder, both basic soldering (wires to terminal strips) and then printed circuit board sol-

### Engineering in High School



dering (bare wires to Arduino hobby/student boards) (Photo 2). The electronics portion of the curriculum ends with the students assembling hobby kits such as sound-activated switches, audio amplifiers, games and similar, and demonstrating them in class. They are also given class lectures on introductory concepts in electricity and electronics, including beginning principles such as what is Ohm's Law, how current flow is calculated, and other basic techniques.

Finally, the students are asked to define a problem that they feel needs solving and to come up with a conceptual design to solve the problem - with a parts expenditure of under \$40. The students are also given an introduction to computer-aided-design tools to help them in their basic understanding of engineering.

Part of the curricula include guest speakers who talk about their careers and provide an overview of the types of jobs that are available in the engineering world, such as automotive, space, aerospace, defense, commercial, and many others. At least one field trip is included, examples include NASA Goddard Space Flight Center in Beltsville MD or the local plant of Northrop Grumman Corporation. At NASA Goddard, the students saw actual spacecraft in assembly and checkout, and large test facilities such as the full spacecraft centrifuge and the acoustic/noise/vibration chamber, as well as satellite tracking control rooms. At Northrop Grumman's Electronic Systems Sector facilities in Linthicum, MD, the students talked to engineers, saw radar systems under construction, and visited the airplane hanger where flying test beds are outfitted with actual flying radar hardware.

Feedback from the students has been 100% positive in that this has definitely influenced their career choice. One student, Keene Waller, commented, "As soon as I saw that there was a new engineering class being offered at Loyola, I knew I had to take it. Mr. Koffel, its teacher, had taught me Geometry the first year of high school, and I was excited to see what he could do for us with his experience in the engineering field of study. The class turned out to



be exactly what I was looking for to help me in my search of what kind of engineer I wanted to be after school." He further said, "Mr. Rassa and Mr. Koffel together proved to be an invaluable resource for the class. On a day where we were merely working on projects and the class didn't have the structure of a typical high school class, they were always open to questions. Whether it was instruction on how to solder on an electrical component or direction on where to take our college studies, both of them gave great advice." It should be noted that Mr. Waller actually won the "Engineering Achievement Award" that Loyola provided as part of the new curriculum, and has entered college in an engineering field.

Another student, Bennett Bradley, had these observations: "I chose to take the Engineering class this year at Loyola because I felt it was a great opportunity to take a class and learn things that were completely new to me. I had never soldered before or done any type of electrical circuit board work, so I felt that the class was a great opportunity to raise my awareness in the broad field of engineering. I enjoy the class very much. It challenges me to think in a different way than other classes do and I feel like I really learned something new after every project." Mr. Bradley has planned to attend the United States Military Academy Prep School the fall of 2013, and West Point the following year. Mr. Bradley observed "West Point has a tremendous Engineering Program and I will continue to look into the opportunities West Point has to offer academically."

Student Ian Clark had the following observations: "I chose the Introduction to Engineering Program because I want to follow in my dad's footsteps as an engineer. Since I have known for a while that I want to pursue engineering in college, I decided to take the Engineering class at Loyola this year to get an idea of what type of engineering I want to do in college. Although I have not yet decided on which facet of engineering I want to pursue, I'm much more informed on what each different engineering track involves. I

have decided to attend Virginia Tech next year based on its strong engineering program. I have enjoyed the Introduction to Engineering class and its flexibility. I would recommend the class to anyone considering engineering in college."

The school admissions director, Mr. John Foley, observed that parents seems quite interested in, and intrigued by the fact that Loyola Blakefield has an Introduction to engineering program, as engineering is considered an essential part of their overall educational opportunities that high school students should be exposed to. And as an overall testament to the success of the program, over 10% of the students who opted for the Introduction to Engineering program at Loyola in its first two years went on to major in engineering in college.

As a career, engineering tends to offer good salary and benefits as well. The National Association of Colleges and Employers shows a starting salary survey each year, and engineering tends to be at the top of the list of average starting salaries for 2013 college graduates. The NACE data show that average starting salaries for 2013 are up 2.6% overall from 2012, which indicates that industries are still in a hiring environment despite the relatively slow recovery from the recession/depression (Chart).

The Aerospace & Electronic Systems Society should be proud of their efforts to engage young year scholars in engineering curricula, and while this example represents a very

### Average 2013 Starting Salary by Field

Field	Annual Salary
Engineering	\$62,062.00
Computer Science	\$58,547.00
Business	\$55,635.00
Health Sciences	\$54,700.00
Math & Sciences	\$42,731.00
Communications	\$43,835.00
Education	\$40,377.00
Humanities/Social Services	\$37,791.00

Chart: Starting Salary Survey for 2013. The average starting salaries for 2013 are up 2.6% from 2012. Source: National Association of Colleges and Employers (NACE), September 2012.

A small percentage of high school students, it should be noted, are presented to future college students, a good percentage of them make this excellent choice. The ultimate goal is, of course, to provide these engineers and scientists that the world so desperately needs, to continue the advancement of technology for humanity. ♦

AESS BoG members are doing their part too. This is from Bob Rassa; but many others of you are helping us a lot as well.

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# Tutorials

- **Editors:**
  - Dr. Braham Himed, Air Force Research Lab, Sensors Directorate
  - Dr. W. Dale Blair, Georgia Tech Research Institute
- **Published Tutorial Issue August 2013**
  - Review of Range-Based Positioning Algorithms (Yan, Tiberius, Janssen, Teunissen, Bellusci)
- **Five papers accepted and awaiting bundling to next issue(s)**
  - Navigation Using Inertial Sensors (Groves)
  - Basic Tracking Using Nonlinear Continuous Time Dynamic Models (Crouse)
  - Basic Tracking Using Nonlinear 3D Monostatic and Bistatic Measurements, Part 1 (Crouse)
  - Basic Tracking Using Nonlinear 3D Monostatic and Bistatic Measurements, Part 2: Refractive Environments (Crouse)
  - Coherent MIMO Radar: The Phased Array and Orthogonal Waveforms (Davis, Showman, Lanterman)
- **Two papers reviewed and corrections are being made**
  - TOAs-Only Deinterleaving, a Constructive Review
  - JPDAF Versions and Implementations: Comparisons for Closely-Spaced Targets

- **Invited four authors/papers – Awaiting submission into IEEE process**
  - Synthetic Aperture Radar (SAR) Interferometry
  - Cognitive RF (jamming, radio, and radar) Sensing
  - Automatic Target Recognition and Classification
  - Over the Horizon Radar
- **Predominance of radar detection and tracking papers**
- **Expanding to other topics – Power, sensor networks, position, navigation, and timing**
- **Actively soliciting additional authors/papers**
- **Collaboration with Transactions editors**
  - Some papers get submitted to AES Transactions, but are clearly more suitable for Tutorial

# Publications Report

AESS Board of Governors' Meeting  
May 22<sup>nd</sup>, 2014  
Cincinnati OH  
Peter Willett



# Outline

- Strategic plan
  - update from officers' meeting telecon
- Financials
  - First third of 2014, credit to Bill Walsh
- Transactions impact
- Magazine advertising
- Journal of Lightwave Technology (JLT)
- Publications “ownership”?
  - Conference publications
  - Website
- Insight from outside
- PRAC
- Motions from PSPB

# Strategic: Transactions

- **Strategic vision: Assure that Transactions are relevant, timely, and technically advanced**
  - **Goal: increase impact factor to 2.0 by 2016**
    - **EIC: improve timeliness, encourage special sections, increase selectivity**
    - **See charts later this presentation**
- **Strategic vision: improve financial impact**
  - **Goal: reduce costs**
    - **VP Pubs: estimate (contract) for 2014 is projected to be \$284k, versus total \$330k in 2013.**
    - **2014 page budget reduced to 3200 (2013 actuals were about 2850 pages)**
    - **over-length page charges (>10 for regular and >6 for correspondence) has reduced per-article publication charges**

# Strategic: Transactions

- Goal: increase revenue
  - VP Pubs: collection of mandatory/voluntary page charges
    - These are the billed amounts:
      - » October 2012: \$38,600
      - » January 2013: \$22,100
      - » April 2013: \$20,500
      - » July 2013: \$22,800
      - » October 2013: \$24,000
      - » January 2014: \$31,600
      - » April 2014: \$35,800
    - It seems unlikely that all of these will be collected
    - Unfortunately an itemized list of collected fees is unavailable, so follow-up is not possible
  - VP Pubs: IEL revenue
    - Due to OA this is uncertain

# Strategic: Magazine

- Magazine

- Strategic vision: Make attractive, desirable, cover timely topics that are relevant
  - Goal: increase impact factor to 1.5 (not 1.0, done!) by 2016
    - EIC: Special issues, historical articles, interviews, reviews, student input, submitted vs. culled, appeal
    - VP Pubs: Proposal to allow articles to be presented at any AESS-sponsored conferences, similar to IEEE SP Letters
- Strategic vision: improve financial impact
  - Goal: reduce costs
    - VP Pubs: vendor
  - Goal: increase revenue
    - VP Pubs: advertising
- Strategic vision: Make sure printed tutorials are useful, informative, and up-to-date technically
  - Goal: one per year
    - EIC: solicit articles

# Transactions Impact

Year	Total Cites	2-year Impact Factor	5-year Impact Factor	Immediacy	Articles	Half Life
2012	5915	1.30	1.76	0.21	257	>10
2011	4952	1.05	1.68	0.15	216	>10
2010	4566	0.92	1.60	0.14	136	>10
2009	4565	1.23	1.78	0.09	126	>10
2008	4403	1.02	1.76	0.10	128	>10
2007	2805	0.94	1.34	0.06	133	>10
2006	2316	0.84		0.23	86	>10
2005	2060	0.77		0.18	110	>10

# Transactions Impact

Top publications - Radar, Positioning & Navigation [Learn more](#)

Publication	h5-index	h5-median
1. IEEE Transactions on Aerospace and Electronic Systems	34	53
2. IET Radar, Sonar & Navigation	23	30
3. IEEE Radar Conference	22	27
4. GPS Solutions	20	31
5. IEEE/ION Position, Location and Navigation Symposium	18	22
6. IEEE International Conference on Ultra-Wideband	16	20
7. Workshop on Positioning, Navigation and Communication	14	26
8. Journal of Navigation	14	20
9. European Conference on Synthetic Aperture Radar	14	19
10. International Conference on Indoor Positioning and Indoor Navigation (IPIN)	13	17

Data taken from Google Scholar, May 21<sup>st</sup>, 2014.

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- We have contracted with IEEE's advertising sales office to solicit advertising for the magazine.
- Many IEEE societies use the IEEE's advertising office. Examples include *Vehicular Technology* and *Robotics and Automation*.
- Approximately 50% of the revenue we make will be ours, the rest will go in commission and accounting.
- My feeling is that this may end up helping a little financially, but will be of greater impact in terms of service to our membership.

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1/2 PAGE	780	730	710	700	680	640	600	550
1/3 PAGE	550	530	500	480	460	430	420	390
1/4 PAGE	420	390	370	360	350	320	280	260
1/6 PAGE	350	330	320	300	290	260	250	240

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Cover 4	1885	1810	1770

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<i>No additional charge for bleed.</i>	

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\*Charter Advertiser Rates in effect until 31 December 2014.

**Commission & Cash Discount**

15% commission to recognized advertising agencies if paid within 30 days of invoice date.

**Terms:** Net 30 days. No cash discount.

**Contract Regulations**

All billing subject to short-rate or rebate to earned rates, depending on the frequency actually used during a 12-month period.

**Liability**

The publisher reserves the right to hold advertisers and/or their advertising agencies jointly and severally liable for money due and payable to the publisher. Publisher is not liable for delays in delivery and/or non-delivery in the event of Act of God, action by the government or quasi-government entity, fire, flood, insurrection, riot, explosion, embargo, strikes whether legal or illegal, labor or material shortage, transportation interruption of any kind, work slowdown, or any condition beyond the control of the publisher affecting production or delivery in any matter.

**Publisher's Protective Clause**

The publisher reserves the right to cancel or reject any advertising at any time and to add the word "ADVERTISEMENT" at the top of any copy which in the publisher's opinion simulates editorial matter and might be misleading to the reader. The publisher will not be bound by any conditions, printed or otherwise, appearing on order blanks or copy instructions when such conditions conflict with the regulations set forth in the rate card.

Advertiser and/or agency to indemnify, defend and save harmless the publisher from any and all liability for content of advertisements printed (including text, illustrations, representations, sketches, maps, trademarks, labels or other copyrighted matter) or unauthorized use of any person's name or photograph, arising from the publisher's reproduction and publication of such advertisements pursuant to the advertiser's or agency's order.

**Mechanical Requirements (Non-bleed sizes)**

Inches			Metric Units (millimeters)		
Unit	Width	Depth	Width	Depth	
Page	7"	X	178	X	254
2/3-page	4-5/8"	X	118	X	254
1/2-page, horizontal	7"	X	178	X	124
1/2-page, vertical	3-3/8"	X	86	X	254
1/2-page, island	4-5/8"	X	118	X	190
1/3-page, vertical	2-1/8"	X	54	X	254
1/3-page, square	4-5/8"	X	118	X	124
1/4-page, square	3-3/8"	X	86	X	124
1/6-page, vertical	2-1/8"	X	54	X	124
Bleed size:	8"	X	203	X	279
Trim size:	7-7/8"	X	200	X	273
Keep all live matter 3/8" inside trim.			Keep all live matter 10mm inside trim.		

Saddle Stitched, Printed Web Offset. Electronic material preferred. If no proof is supplied, one will be pulled and charged as an extra. Ads which do not conform to mechanical requirements will be resized at advertiser's expense. Troubleshooting: \$100.00/hour, 1 hour minimum.

- This is the second page of the advertising “flyer” that is available at this conference.
- Including postage, etc. the magazine costs about \$450 per page.
- Note that there are “premium” pages, such as the back cover and the inside covers.
- We will not sell advertising on the front cover.



# Publications Ownership?

Ashokgupta@

**Abstract-** This paper compares known long and short code sequence generation techniques with the author proposed arbitrary multidimensional code pattern synthesis and super high resolved code beams generation methods to obtain amplitude dependent performance function (rather than minimize SNR dependent exponential  $P_e$ ). Furthermore, this paper compares spread-spectrum shaping techniques with the author proposed no sidelobe spectrum synthesis to obtain impulse correlation or multidimensional spectrum synthesis. This paper also explores the possibility of unifying arbitrary code spectrum generation technique with arbitrary no-sidelobe spread-spectrum synthesis.

Various molecular structures are also summarized in this paper to synthesize molecules with connections among its complex multidimensional components as atoms and sub-components. These maps are useful in material synthesis for super high speed

From Southeast  
Conference 2002

# Publications Ownership?

Also (5/20/95), M C Y = A (-high proposer support by window), M C Z = B(-work support by window selection). M C Y is written as (8/5/95) M C X = A. By the Kastle law, the reversal occurs in the mirror solar company.

A3.2 Low Resolution to Problem Resolution (1/92): In reverse (1) REBIRTH Method (3/93): M C O = Q and magnetically(contractually) 2,3,4 Growth process in the o's.(2) POWER Law(3/93): Intermittent sound gun and discontinuous tab water shower can be made continuous by pressing the speed. Thus meteor trails can be made continuously utilized. SUN's formula  $R I^2 = P$  (power heat dissipated) implies sun's theory dropped from electronic world(7/92). (3) SUM Law(4/27/93):  $A + B = C$ ,  $C=3$ . Which one (A or B) is window selection. Fast listen to E. Slow person is among neighbors(11/4/95). (4) CERTAIN Law (1/94): MCF=H. Robotics is modem (mode M)(5/24/97). (5) IMPOSSIBLE Theorem(9/96):  $j$  times  $J=1$ ,  $J^2=1$ .  $J$  means imaginary and  $.$  means typing second.  $j$  means apply(4/6/96). 2 High (4/10/94) vs. Low (center 4) 5(code little man,7/28/96). The high person (-life) and movingdownward to typing second is the problem resolution (Behavior model (5/90) of K. Gupta, Thumb(-production) Economics as unification of "business planners"). In reverse K's(ARth) ideas (3/89) are spring(-aspirin),HOP(-FH)and shake(circularly). It appears bang occurs when earth gets letter and drops, similar to apple drop from tree, (subsequently window selection assignment). Thus meaning of GRAVT can be explained.(6) "BUSINESS PLAN" Inclusion(3/7/97):  $E_{MC} = P = \text{Hammer squared}$ . Geographic area(valley,plane, coast meaning. 10/10/96)can be identified with the profession (accounting electrical(fuse burn 11/96)(10/23/96))

From Radar Conference 1999

# Publications Ownership?

meteor burst, body etc. Deterministic and/or ripple chaos in each media can also be modeled by cascade of transfer functions or by dynamics. In a general universal link, data transmission is stochastic or dynamic. Therefore, link components are represented by cascaded multi-layered transfer functions, such that a transmitter or a receiver can be explained by data models or media models respectively. Dynamic resolution map in multidimensional data synthesis is discussed in

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more, super high speed communication limit is shown to be possible by a new, proposed in this paper, dynamic equalization technique, utilizing chip resolution.

## I. HISTORICAL BACKGROUND

Decreasing data rate meteorburst binary FSK communication was first analyzed by M. D. Grossi and A. Javed (Agard paper No. 244, 1977). Known pulse to pulse blood pressure decay (1972) and known exponential signal decay in underdense meteor trails is known to be similar to exponential decay in semiconductors, when strobe scope light is flashed (author's 1971 B.Tech. thesis, life-time measurement assignment at Indian Institute of Technology, Kanpur). This decreasing data rate was made flat by this author in A. K. Gupta

- Thanks to Hugh for bringing this forth.
- IEEE is leery of removing these papers since there is concern the author is serious
- Larger question: Who “owns” conference publications?
  - VP Pubs? VP Conferences?
  - Who “owns” the AESS website?
  - De facto it seems to be VP Pubs. That is no problem. But perhaps this ought to be in the governing documents?

# Journal of Lightwave Technology

- Jointly sponsored by Optical Society of America and various IEEE Societies
- Mike Cardinale is our current AESS steering committee representative
  - Mike has done this for last 11 years, and this involves bi-annual telecons/meetings
- Require second representative
  - Transactions Associate EIC Michael Rice
- They will use our QEB to alert members to new issues

## Published by:

- IEEE Aerospace and Electronic Systems Society
- IEEE Communications Society
- IEEE Electron Devices Society
- IEEE Instrumentation and Measurement Society
- IEEE Microwave Theory and Techniques Society
- IEEE Photonics Society
- IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society
- Optical Society of America

## Contacts

### Editor-in-Chief

Peter J. Winzer

Alcatel-Lucent Bell Labs

# Insight from Outside

- Willett is now editor-in-chief for IEEE Signal Processing Letters (SPL)
  - about 1800 submissions per year versus 600 for AES Transactions
  - acceptance rate around 20% versus 35% for TAES (which is pretty low too)
  - sub-to-pub is about 75 days
  - 4 pages plus at most one page of bibliography
  - IEEE “in house” publication
  - there is significant support for EIC from IEEE staffers in Piscataway, our EICs do it all themselves

# “iThenticate” Plagiarism Detection

The screenshot shows the iThenticate web interface. The main document is titled "single column.pdf" by DEYUN WEI. The document text is as follows:

The Wave Packet Transform associated with the Linear Canonical Transform

(anonymous)

**Abstract**—In this paper, a new kind of wave packet transform (WPT) associated with the linear canonical transform (LCT) is proposed, this new WPT (WPTL) is defined based on the ideal of the LCT and the WPT. Some properties and physical meaning of the WPTL are investigated. In particular, we show a version of the resolution of the identity of WPTL. Moreover, the relationship between the WPTL and the Wigner distribution (WD) is derived. At last, we introduce the concept of the fractional wavepacketgram, which is defined as the modulus square of the WPTL. It is proved that the fractional wavepacketgram is a member of the Cohen class time-frequency distribution where the kernel is a scale dependent ambiguity function.

**Index Terms**—Wave packet transform, time-frequency distribution, linear canonical transform, Wigner distribution, ambiguity function.

The match overview sidebar on the right lists the following matches:

Rank	Match	Percentage
1	CrossCheck 190 words B. Suter. "Fractional wave packet transform", 1996 IEEE Digital Signal Processing Workshop Proceedings, 1996	6%
2	CrossCheck 139 words Tian-Wen, Che, Li Bing-Zhao, and Xu Tian-Zhou. "The ambiguity function associated with the linear canonical tra ..."	4%
3	CrossCheck 131 words Qiang Xiang. "The Linear Canonical Transform and Its Application to Time-Frequency Signal Analysis", 2009 Inte ...	4%
4	CrossCheck 126 words He, X. "An enhanced psychoacoustic model based on the discrete wavelet packet transform", Journal of the Franklin	4%
5	CrossCheck 111 words Tao, R., Y.E. Song, Z.J. Wang, and Y. Wang. "Ambiguity function based on the linear canonical transform", IET Sig	3%
6	CrossCheck 98 words T.E. Posch. "The wave packet transform (WPT) as applied to signal processing", [1992] Proceedings of the IEEE-S ...	3%
7	CrossCheck 98 words Chen, L. "Image encryption with fractional wavelet packet method", Optik - International Journal for Light and Electr	3%
8	CrossCheck 73 words T.E. Posch. "The wave packet transform (WPT) as applied to signal processing", [1992] Conference Record of the ...	2%

Is this a paper or a quilt?

# Insight from Outside

- Website:
  - The ScholarOne (ManuscriptCentral) web submission tool is fine but in my opinion should not be the only option, as it is for in-house IEEE publications
- Open Access:
  - IEEE has not presently set the OA fees for letters or correspondence items any different from regular papers
  - presently \$1750 for hybrid publications (most) and \$1350 for all-OA publications
  - this is being finessed at IEEE by such people as Bill Emery

# Insight from Outside

- Conferences:
  - IEEE is setting its face against re-publication of conference papers in journals
    - I do not think that IEEE has adequately thought through the financial impact this will have on conference income
  - SPL papers can be presented at any SPS conference (especially ICASSP, ICIP, Globecom) within one year of publication
    - no further review
    - registration fee paid
    - no further publication (no IEEE Xplore duplication)



# PRAC

- Periodicals Review and Advisory Committee
  - every five years
  - for us in November 2014
- Much work in producing reports
- Actually it is a useful experience
  - advice from reviewers
  - reviewers are people like me, Lance, Dale and Teresa
  - lessons-learned go both ways
- Much work in producing reports
- Very important to remember:
  - Much work in producing reports

# PSPB Motions

- There should be two sets of eyes, apart from the EIC who actually pulls the trigger, when an article is immediately rejected for technical (as opposed to administrative) reasons
  - Probably not all that relevant to us
- Conference publications are seen (?) to be as archival (IEEEXplore) as journal, so overlap should be minimal
  - no explicit percentage
  - there should be significant additional material
  - “?”: journals are reviewed in detail and checked
  - consider SP Letters model
  - perhaps future publications will be shorter abstracts?

# AESS Publications Operating Budget

2014 Budget Expenses Summary

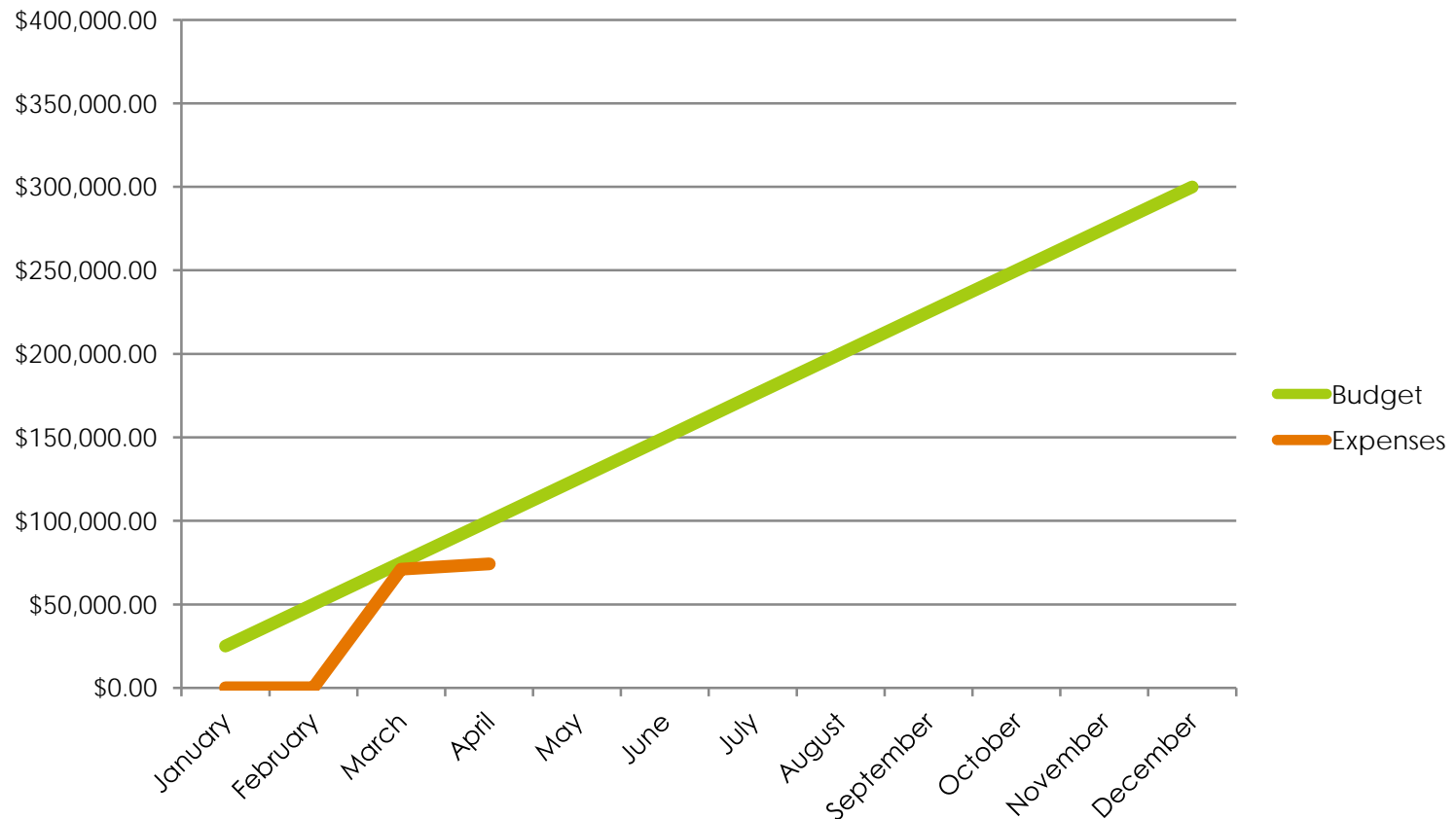
January - April 2014

# 2014 Budget Expenses Estimate

## AES Transactions

- Allen Press (AE-T) - \$284,000
  - 1<sup>st</sup> year of 3 year contract for integrated services
  - Managing Editing, Copy Editing, Typesetting, XML tagging
- Precision Computer Works (EJP) - \$15,000
  - eJournal Database
- Total for 2013: \$299,000
  - Does not include IEEE-related expenses attributed to Transactions (e.g. various purchase services, XPLORE, etc.)
  - Comparative expenses for 2013: \$330,007
  - EJP estimate covers work for *Systems Magazine* as well

# AES Transactions Expenses – Estimated vs. Actual

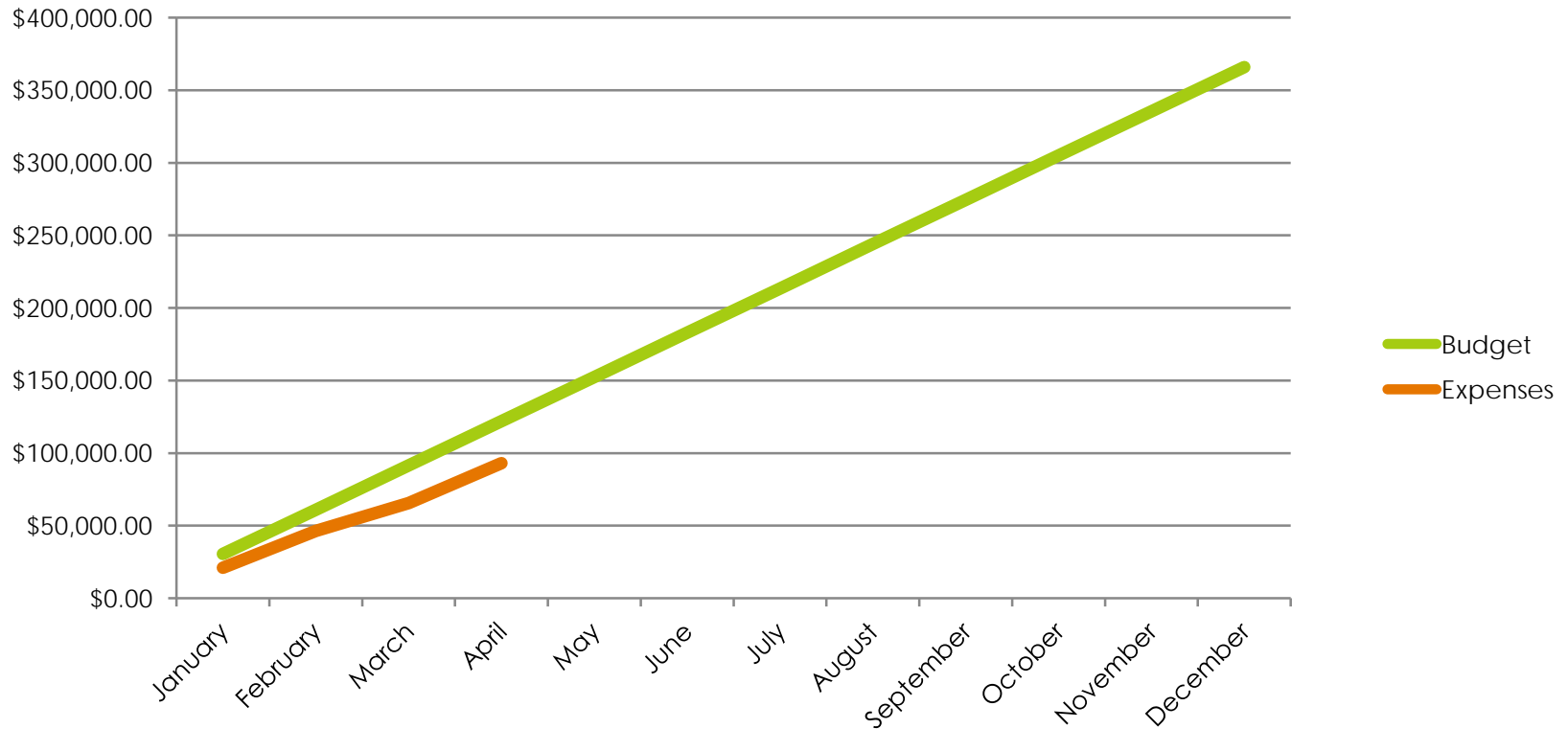


# 2014 Budget Expenses Estimate

## AES Systems Magazine

- Allen Press (AP-S) - \$311,100
  - Publication & Delivery Services
  
- Susanne J. Walsh (SJW) - \$35,000
  - Administrative & Asst. Admin. Editors
  
- David Dobson (DD) - \$20,000
  - Editorial & Publication Consultant
  
- Total for 2013: \$366,100
  - Does not include IEEE-related expenses attributed to Transactions (e.g. various purchase services, XPLORE, etc.)
  - Comparative expenses for 2012: \$360,000 (Difference is 2% escalation for Year 2 of Allen Press contract).
  - SJW & DD estimate covers work for *Transactions Journal* as well

# AES Systems Magazine Expenses – Estimated vs. Actual



# Backup Slide

## Summary of Expenses

<b>SYSTEMS</b>	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
<b>Allen Press</b>	\$20,323.91	\$16,878.41	\$17,415.87	\$17,137.67		
<b>SJW</b>		\$5,833.35		\$5,833.35		
<b>DBD</b>	\$724.10	\$2,534.35	\$1,838.10	\$1,838.10	\$1,364.65	
<b>AP - Other</b>				\$2,704.07		
<b>Totals</b>	\$21,048.01	\$25,246.11	\$19,253.97	\$27,513.19	\$1,364.65	\$0.00
<b>TRANSACTIONS</b>	<b>January</b>	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
<b>Allen Press</b>			\$71,125.01			
<b>EJPress</b>				\$3,220.00		
<b>Totals</b>	\$0.00	\$0.00	\$71,125.01	\$3,220.00	\$0.00	\$0.00