

The New AESS “Systems” Magazine

Peter Willett
VP Publications Report
AESS Board of Governors’ Meeting
Myrtle Beach SC, April 2012

What's New?

- First, an acknowledgement:
 - EIC Teresa Pace
 - Associate EIC Maria Greco
 - Associate VP Publications Dale Blair
 - Judy, Dave, Susanne, Bill and many many more ...
- Original material:
 - in previous years we were content-starved
 - about 70% of Systems material was culled from our conferences ... good papers, but not new
 - April 2012 issue: 50% from conferences, 50% from contributed material
 - Upcoming June 2012 issue: 100% contributed through website.
 - website statistics:
 - 2011: 136 submissions (52% acceptance rate)
 - 2010: 84 submissions (32% acceptance rate)
 - 2009: 52 submissions (41% acceptance rate)
 - 2008: 53 submissions (50% acceptance rate)
- Layout:
 - removal of abstracts
 - rationalization of cover art versus inside material

- Organization:
 - associate editors are assigned to technical areas
 - some AEs have been replaced (performance issues)
 - EIC checks for “lost souls” regularly
 - EIC gives guidance to AEs on review practices
 - EIC’s “Turning a Conference Paper to a Magazine Article” editorial

Magazine Leadership

- VP Pubs- Peter Willett
- EIC – Teresa Pace
- Assoc EIC – Maria Greco
- Assoc EIC – Dale Blair (New!)
- AESS Trans EIC – Lance Kaplan (New!)
- Admin Editor – Dave Dobson (in transition to retire)
- Admin Creator Editor – Bill Walsh (New!)
- Admin E-journal Editor – Susanne Walsh
- Book Reviews Editor – Darin Dunham
- Student Research – Rich Coogle, John Glass (New!)
- Conferences – Mark Davis
- Awards-Erwin Gangl
- Assoc Editors (Erik Blasch- Information Fusion, Shirley Cheng – Guidance, Haiying Liu – Image Processing, Rao Manepalli – Satellites, Mauro De Sanctis- Space Systems, Ralph Teague – Sensors, Ruhai Wang- Systems, Steve Watkins –Systems)

Magazine Updates

- Monthly teleconferences with all hands
 - Review upcoming issue content with all participating editorial board members
 - review content
 - ensure we have correlated content with cover
 - discuss future issues
 - review news and info conference updates and advertising
 - cover action items, any other outstanding items
 - Many (most?) associate editors from the Magazine call in and participate for more than an hour!
 - Led by Teresa, with help from Dale & Maria
 - Posting of upcoming articles and issues on the web
 - see layout
 - catch mistakes (yes, there are some still)
 - thanks to Judy and Susanne for this

More Magazine Updates

- Added Book Review Section
- Added Student Research Section
- Updated guidelines
 - Guidelines for authors
 - Guidelines for book reviews
 - Guidelines for transitioning a conference paper to a magazine article (March 2012)
 - Guidelines for Harry Mimno award
- Updating operating plan



IEEE AEROSPACE & ELECTRONIC SYSTEMS SOCIETY
WELCOME TO THE AESS



READY FOR PUBLICATION

Home » AESS Documents

- 2011 December Issue
- 2011 November Issue
- 2012 February Issue
- 2012 January Issue
- 2012 March Issue



2012 JANUARY ISSUE

Home » AESS Documents

Name	File Type	Size		
Canadian - Jan 2012	application/pdf	1.73 MB		
Defense - Jan 2012	application/pdf	4.06 MB		
Essentials - Jan 2012	application/pdf	310.17 KB		
London - Jan 2012	application/pdf	6.22 MB		
Low Power - Jan 2012	application/pdf	2.27 MB		
Optimized - Jan 2012	application/pdf	620.23 KB		

< 2012 February Issue up 2012 March Issue >



Society News

Canadian Tracking and Fusion Group (CTFG) Workshop 2011

The Canadian Tracking and Fusion Group (CTFG) was established to bring together tracking and fusion researchers and practitioners from across government, industry, and academia with the objective of providing a forum for issues of common interest across diverse fields of application, including land, air, space, maritime, and underwater. Annual workshops are held to promote discussion and collaboration.

The CTFG Workshop 2011 was held March 9-11, 2011 in Ottawa, bringing together 57 individuals from 21 organizations for presentations, discussion, and collaboration. Participants included government from several Defence R&D Canada (DRDC) Centres (Ottawa, Atlantic, and Valcartier), and the Communications Research Centre, academia from McGill University, McMaster University, Memorial University, Royal Military College, and the University of British Columbia, with a broad spectrum of industry representatives.

The workshop was supported by the IEEE Ottawa Section, the IEEE AESS Chapter, IEEE SP/OE/GRS Joint Chapter, Raytheon Canada, and Larus Technologies. It was co-hosted by DRDC.

OVERVIEW

The workshop was welcomed by Doreen Dyck, head of Radar Systems Section, DRDC. A plenary presentation was given by IEEE Fellow Fred Daum of Raytheon's Integrated Defense Systems (IDS) on developments in industrial strength particle filters and, in particular, his exact flow-based particle filter which works well in high-dimensional space. The workshop focused on five areas of research including: target tracking, radar beam scheduling, sensor management, communications, and decision support. In addition, four working panels were established and many research areas and available data sets for future collaboration were identified.

WORKSHOP HIGHLIGHTS

Target Tracking and Sensor Management (Day 1)

This Kirubarajan of McMaster University presented methods of target tracking in clutter and estimation analysis



Attendees of CTFG Workshop 2011

of manoeuvring targets. He also gave a demonstration of numerous tracking methods developed at McMaster over the years.

In the afternoon, Erik Blasch, a visiting scientist to DRDC from the US Air Force Research Laboratory (AFRL), provided an invited lecture on joint data and sensor management for persistent surveillance. This was followed by four presentations on radar resource management and meta-level tracking methods, given by Zhen Ding of DRDC, Vikram Krishnamurthy of the University of British Columbia, and Alain Gosselin of Royal Military College. Garfield Mellema and Chunsheng Liu, both of DRDC, separately presented sonar tracking problems and solutions.

Two McGill University graduate students, Denis Estébay and Frederic Thoinin, and their supervisors, Mark Coates and Michael Rabbat, delivered presentations on distributive particle filter methods and topographic target tracking methods.

The day ended with a panel discussion focusing on target tracking, available data sets, and potential collaboration opportunities.

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PRIVATE PUBLICATIONS

Home » AESS Documents

Documents for Publication members.

- Book Review
- December 2011 Telecon Documents
- January 2012 Telecon Documents
- Misc Documents
- November 2011 Telecon Documents
- October 2011 Telecon Documents
- Quarterly Email Blast
- Ready for Publication
- September 2011 Telecon Documents

< Publications

up

Book Review >

peterkwillett

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Editorial Board

You may access Magazine Editorial Board Documents at the following location:

Private Publications

Announcements

Press Conference held - ESTEL 2012 Conference Presentation
 Wednesday, January 11, 2012 - 06:50

Ram Gupta Receives MGA Leadership Award
 Wednesday, December 28, 2011 - 03:24

Quality of Life Panel Event
 Friday, December 9, 2011 - 07:19

1 of 6 >>

Calendar

January						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Upcoming Events

AESS Officers' Strategic Planning Meeting
 Saturday, January 21, 2012

2012 IEEE Aerospace Conference
 Saturday, March 3, 2012

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- Special Issues

- Passive Covert Radar (Heiner Kuschel & Alfonso Farina, October 2012)
- Standards

#	AE	Corresponding author	Title	Status
SYSAES-201100062	Farina	O'Hagan	A multi-frequency hybrid passive radar c...	Revise and re-review (extensive revision needed; should be re-reviewed.)
SYSAES-201100068	Farina	Olsen	Performance of a Multiband Passive Bista... Part II	1st round review 2011-08-31
SYSAES-201100130	Farina	Brown	Passive Bistatic Radar Experiments from ...	1st round review 2011-10-24
SYSAES-201100070R	Farina	Falcone	Potentialities and challenges of WiFi-based passive radar	Accepted
SYSAES-201100072	Farina	Poullin	Passive 3D tracking of low altitude targets using DVB (SFN) broadcasters exploitation of the elevation angle estimation using DVB-T : experimental results	Revise and re-review (extensive revision needed; should be re-reviewed.)
SYSAES-201100071	Kuschel	Poullin	Elevation angle estimation for low altit...	1st round review 2011-09-01
SYSAES-201100073	Kuschel	Conti	High Range Resolution Multichannel DVB-T Passive Radar	1st round review 2011-09-02
SYSAES-201100115	Kuschel	Misiurewicz	Suboptimal Space-Time Processing Approac...	1st round review 2011-10-29
SYSAES-201100067	Kuschel	Olsen	Performance of a Multiband Passive Bista... APart I	1st round review 2011-08-31
SYSAES-201100093	Kuschel	Fulcoli	Use of Graphics Processing Unit for Passive Radar Signal.....	Accepted

Expected end of 1st round of review: March 15 2012
 Expected end of 2nd round of review: April 15 2012
 Expected issue of publication: July 2012

- Features:
 - Systems EIC editorials
 - AESS Officers editorial
 - society news
 - *timely* conference notices
 - linkage with Transactions (editorials, upcoming articles, awards)
- Initiatives:
 - historical interviews
 - book reviews (solicited)
 - student research editors (John Glass & Rick Coogle)
 - solicitation of conference reports
 - submission of *improved* conference articles that are identified as “best papers” in AESS conferences
 - advertising (wait on this)
 - all submissions (even “news”) through EJP website

What is Proposed?

- New single vendor for publication services
 - Allen Press (see later)
 - ideally: by October 2012 issue (see later)
- Maintain current issue and page count
 - the Magazine – along with the QEB – is the main *regular* way we communicate with our members
 - we can revisit this later, but right now it appears that we have the momentum for a first rate *monthly* publication
 - we will save money and offer a better product

Present Vendors

	Vendor	\$ Per Year	\$ Per Issue	\$ Per Page
Web Hosting	PCS (EJournal Press)	7500	625	12
Composition	Prototype	150000	12500	240
Manufacture	Victor Graphics	109000	9083	174
Mailing	APC & CAC-DMS	155000	12917	248
Total		421500	35125	675

- 12 issues, 52 pages per issue
- Exclusive of administrative costs: approximately \$50000

Proposed Vendors

	Vendor	\$ Per Year	\$ Per Issue	\$ Per Page
Web Hosting	PCS (EJournal Press)	7500	625	12
Copy Editing	Allen Press	30000	2500	52
Composition	Allen Press	42000	3500	73
Manufacture	Allen Press	48000	4000	83
Mailing	Allen Press	155000	12917	248
Total		282500	23542	490

- Approximate figures based
- November preliminary quote
- Awaiting response to RFQ
- 12 issues, 48 pages per issue
- 5300 copies
- Mailing assumed same cost, but perhaps lower because lighter

Proposed Vendors with Buffer

	Vendor	\$ Per Year	\$ Per Issue	\$ Per Page
Web Hosting	PCS (EJournal Press)	7500	625	12
Copy Editing	Allen Press	30000	2500	52
Composition	Allen Press	42000	3500	73
Manufacture	Allen Press	48000	4000	83
Mailing	Allen Press	155000	12917	248
Buffer	Dave Dobson	30000	2500	52
Total		312500	26041	543

- Approximate figures based
- November preliminary quote
- plus Dave's best guess
- Awaiting response to RFQ
- 12 issues, 48 pages per issue
- 5300 copies
- Mailing assumed same cost

Advantages of new vendor

- Nicer “look and feel”
 - better typesetting, more appropriate paper
 - cover art will reflect material inside
 - color
- Equations (not too many!) supported
- Single-vendor point of contact
- Better robustness (large vendor)
- Cheaper
- Same vendor as Transactions
 - good experience
 - common point of contact (Rita Janssen)
- Continuity
 - author interface
 - administrative editor

Concerns

- Uncertainty
- IEEE “outside vendor” rules:
 - would need PSPB approval (potential delay of years)
 - would need to get two outside quotes, plus IEEE inside quote
 - would need to pay penalty equal to two years of IEEE costs
- Our interpretation of these rules is that they do not apply to AESS, since we are already “outside”.

From the PSPB Manual

8.4.4 Publication of Periodicals Outside the IEEE. Publication of periodicals outside the IEEE is permitted only with the approval of PSPB and the Board to which the sponsoring Organizational Unit reports. Approval shall only be granted when the conditions below have been met. Periodicals that are published under the supervision of IEEE staff are defined as published inside the Institute. All others are considered to be published outside the Institute. Periodicals that are not published under the supervision of IEEE staff are termed as being published “Outside the IEEE.”

- A. The sponsoring Organizational Unit shall submit a written proposal for such publication, with which the relevant Director concurs.
- B. There shall be a potential distinct cost or time advantage for comparable quality, or if the expected advantage is other than cost or time, that expected advantage shall be stated in the proposal.
- C. Quotations shall be obtained from at least two sources other than the IEEE for editing, composition, printing, and distributing the periodical.
- D. The sponsoring Organizational Unit shall have a functioning broad-based publishing organization, including a Publications Committee, an Editor, and Associate Editors, or equivalent.
- E. The above publishing organization shall have demonstrated proven performance capabilities and knowledge in the publications field.
- F. If possible, the transition to outside publication shall start with the first issue of the calendar year.
- G. An annual review shall be made for three years after a transition to publication outside IEEE is made and thereafter at least every five years, with more frequent review at the discretion of PSPB.
- H. All contracts for outside publication shall be handled through the IEEE Publications department. (Sponsoring Organizational-Unit officers may make initial, exploratory negotiations, but the final documents are subject to review by and signature of the Staff Executive - Publications, or his or her designated agent.)
- I. The sponsoring Organizational Unit shall continue to pay its appropriate share of the fixed costs established for the IEEE Publications department for a period of three years following withdrawal from the use of the IEEE Publications-department services for the publication of Organizational-Unit periodicals. The schedule of said fixed costs per page shall be determined by the Staff Executive - Publications. It shall reflect the then current conditions in the IEEE Publications department and shall receive the approval of PSPB. Then, the sponsoring Organizational Unit shall pay its fee according to the sliding scale as follows.
 - 1) In year two of the three-year recovery period, the fee is based on the number of pages currently published by the periodical times the fixed cost per page.
 - 2) In year two, the fee will be 2/3 of the annualized fixed costs.
 - 3) In year three, the fee will be 1/3 of the annualized fixed costs.

In summary, the total is equal to fixed costs for two years. Any services of the IEEE Publications department in connection with the transition to outside publication, or required to correct deficiencies in the performance of the outside publisher, will be billed separately and shall be an additional responsibility of the sponsoring Organizational Unit. Revisions to Section 8.4.4 – Publication of Periodicals Outside the IEEE, as contained in this manual, require the review and approval of the IEEE Board of Directors, using the process in accordance with IEEE Bylaw I-300.4(5).

Developments

- AESS Pubs administrative staff put together a good statement of work and had a bid from Allen Press
 - This was submitted to IEEE in March.
 - IEEE must approve all contracts.
 - Actually the quote was approximately \$300k, about 20-25% less than our current figures.
 - Tutorials (one per year) now included.
- The IEEE response was that since the quote exceeds \$250k, IEEE rules insist that we get three quotes.
 - Actually, since the Transactions is also with Allen Press the single-vendor over-reach is significant.
 - One concern at this point would be that we need to wrap the Transactions bid into this, but this is not the case.


More Developments

- Alyson Rupp has been working with us.
- We tried to split the quote. This will not work.
 - Not trying to get around rules, just exploring options.
- So we need quotes from three separate vendors.
 - IEEE is helping to identify these.
 - Notably, we have not heard that IEEE “in-house” publications need be one of these.
 - Once the RFQ is submitted, it will close in 30 days.
- IEEE suggested that we ask for a “loyalty discount” from Allen Press.
 - We already have the Transactions with Allen Press.
 - IEEE CS, I&M, etc. are with Allen Press too.
 - Rather surprisingly, Allen Press is considering this.
- Current plan is that the first issue under the new format is being planned for October 2012 with a special issue on Passive Radar.
 - IEEE has suggested starting January, but an argument against this is that we want to have a strong Magazine ready before membership renewal.

An Idea

- Roger Oliva suggested that we explore an “App” for parallel delivery of Magazine content.
 - IEEE Computer Society does this.
 - Nice idea, worth exploring.
- Rita Janssen (Allen Press) is examining.
- Informal quote from Teresa Pace’s colleague:
 - \$10k per issue plus \$0.30 per download.
 - Seems a little pricy ... but this is just one option.
 - It is possible that some advertising income may come from an App.


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Status of the IEEE Transactions on Aerospace and Electronic Systems

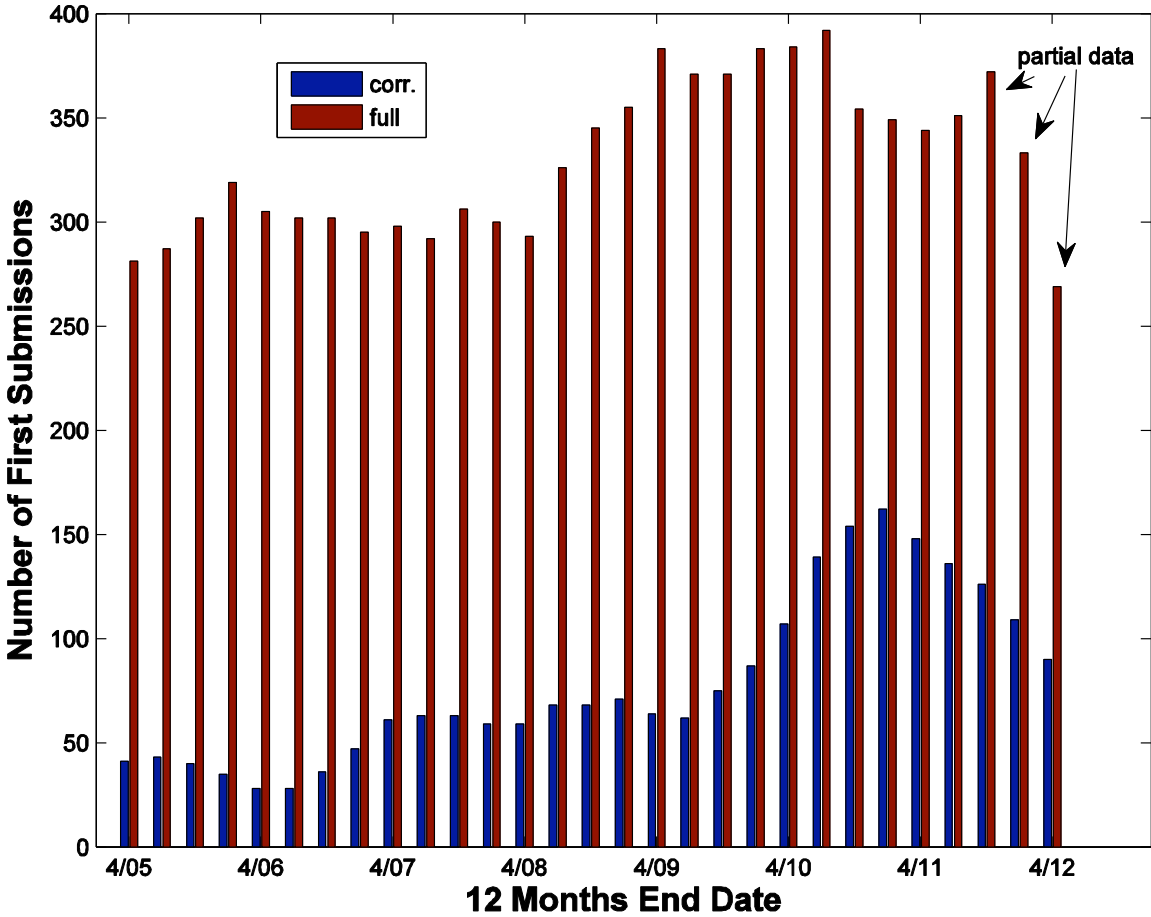
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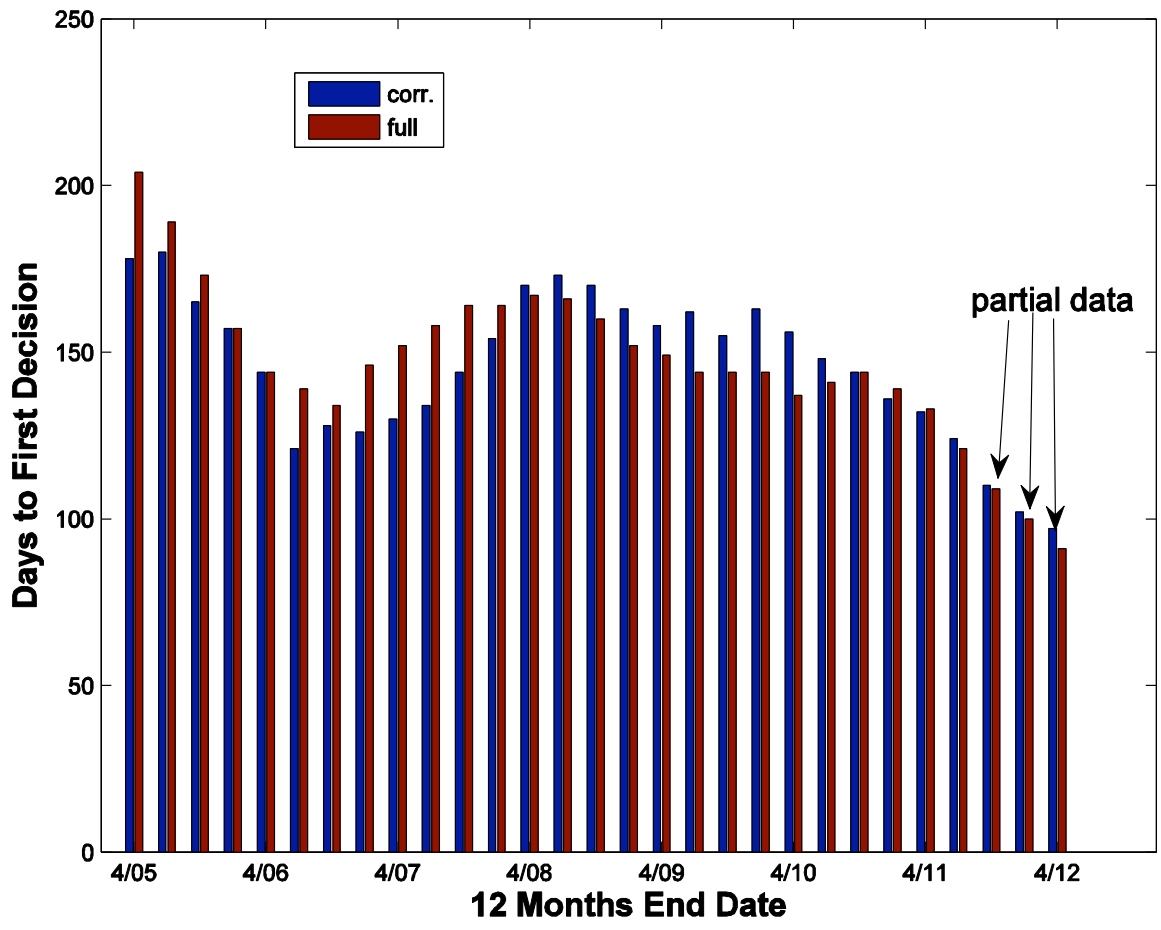
Lance Kaplan, Editor-In-Chief

April 24, 2012

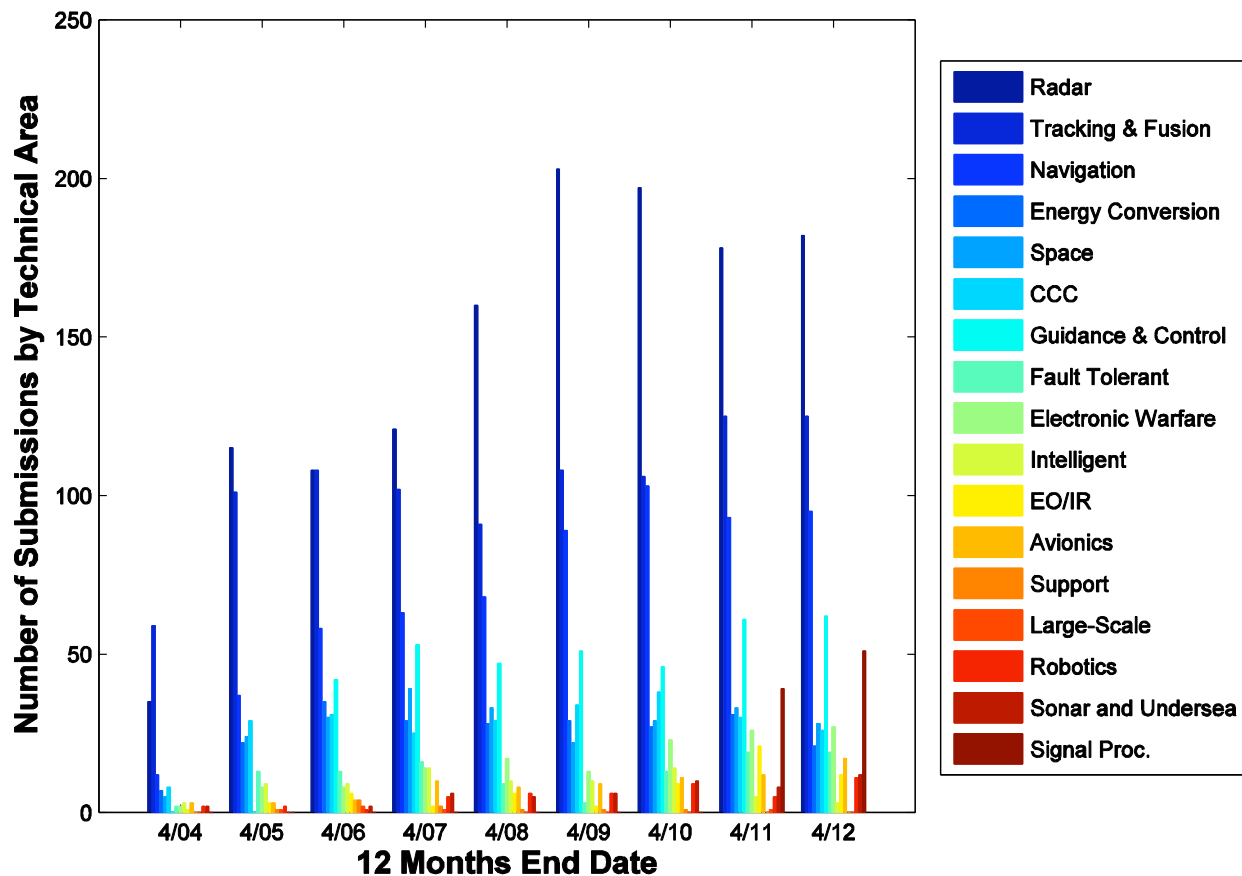
Transactions Overview

Below, please find the data on submissions and times to first decision. Our target is 3-4 months from submission to first decision. The number of submissions continues to rise. The number of papers appears to be on the rise for 2012 given the levels from the partial data. The time to first decision is still following the downward trend.





The next plot shows the submissions by technical area. The top four areas, in order, continue to be Radar, Tracking & Fusion, Navigation, and Guidance & Control. Note that Signal Processing is a new area that started in 2011. Signal Processing is now fifth, with twice as many papers as number six on the list, Space Systems. More will be said about signal processing later in this report.



Executive Editorial News

I replaced Peter Willett as Editor-In-Chief on January 1st. Jose Bolanos has stepped down as Business Editor after many years of exceptional service. The Business Editor collects mandatory and voluntary page charges that partially support our Transactions. Peter Willett is temporarily covering this important function. *We need to identify a permanent replacement for Jose.*

IEEE Policy News

No official changes to IEEE publication policies were reported at the April Panel of Editor meeting. However, a number of changes are still in the works.

First, IEEE is still considering alternative metrics for quality beyond the traditional 2-year impact factor. These could include the eigenfactor, article influence, Google H5, etc. IEEE is also revisiting their hybrid open access model. They are considering lowering the \$3000 author fee for a paper to appear in IEEE Xplore as open access because very few authors have opted to pay the fee.

Apparently, authors' postprints (the version that is accepted) can be posted on IEEE Xplore as the preproduction version of the paper as long as the PDF is Xplore compliant. A portal similar

to IEEE PDF Express is available to assist authors to ensure compliance of their PDFs. We will explore the issue of posting the postprints on IEEE Xplore so that we improve are time from submit to Xplore posting metric. As Peter reported last year, we are far from compliance, and we need to consider methods to improve those numbers that do not lower the quality of the technical content or the accuracy of the final product.

A proposed open access mega journal in the style of PLoS ONE is going up for TAB vote in June. PLoS ONE began in 2006, and it was able to achieve a two-year impact factor of 4.411 by 2010. The topic scope of the proposed mega journal would be IEEE-wide, and articles would be evaluated only on scientific correctness. According to the presentation, novelty and significance of the work would not be a factor in the review decision. The presentation of the proposed journal led to many passionate comments for and against the proposed journal during the Q&A.

IEEE is planning to process every accepted periodical paper through a plagiarism checking known as CrossCheck. Any paper flagged by the software will first be reviewed by IEEE staff for a possible plagiarism infraction. Papers that are deemed problematic by IEEE staff will be sent to the EIC who has the authority to make the final decision.

A final issue that affects our Magazine was discussed. IEEE policy allows for IEEE conference papers to be republished “as is” in an IEEE periodical as long as it is reviewed using the same standards as other papers in the periodical. It seems that this policy was discussed to simply poll the audience’s sentiment regarding the policy. Based upon the discussion, it seems that the sentiment is mixed.

Special Section

A special section on Compressed Sensing Applied to Radar was approved in January, and a call for papers was distributed to the AESS community immediately after approval. The deadline for initial papers is July 31, 2012.

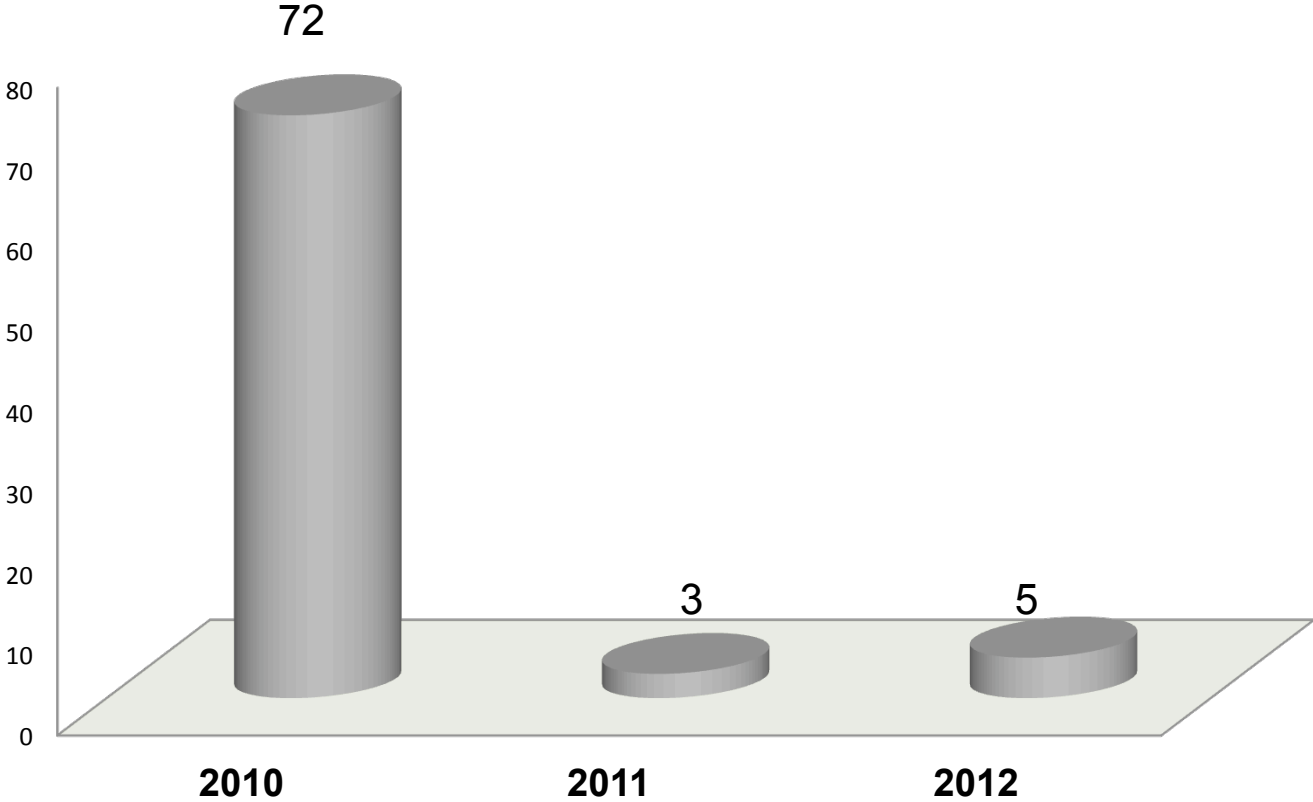
Editors and Editorial Areas

Michael Braasch has stepped down as Navigation Technical Editor due to expanded duties at his university. Dan Aloï has been promoted to the position of Navigation Technical Editor after years of meritorious service as a Navigation Associate Editor. Dan is currently searching for a new Associate Editor.

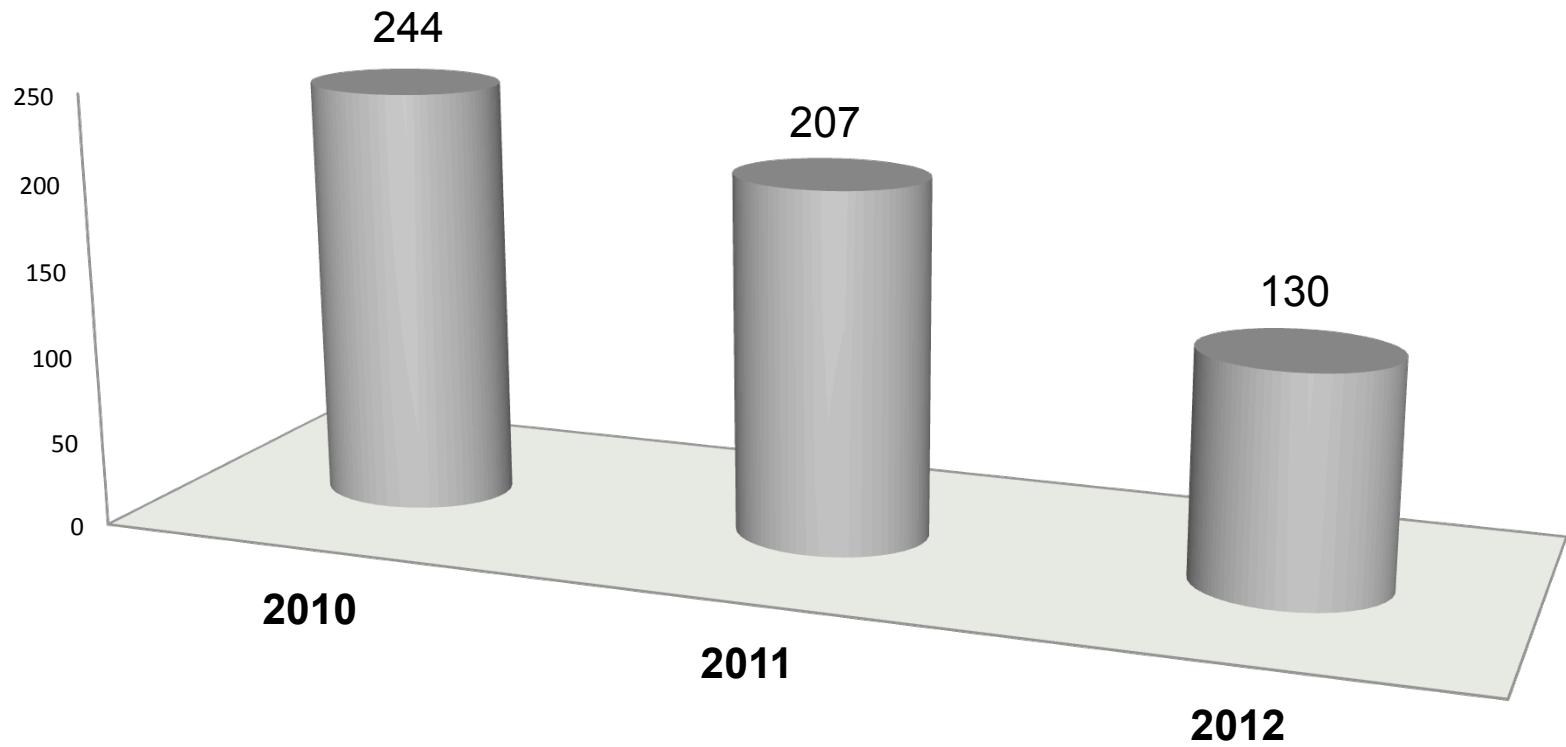
As mentioned earlier, the Signal Processing in Aerospace Systems has emerged as popular technical area. To handle the increased load, Kainam Thomas Wong from Hong Kong Polytechnic University has recently been added as an Associate Editor to help out Wayne Blanding.

On the page that follows we see a table of all associate editors and their performances in terms of load, timeliness and selectivity.

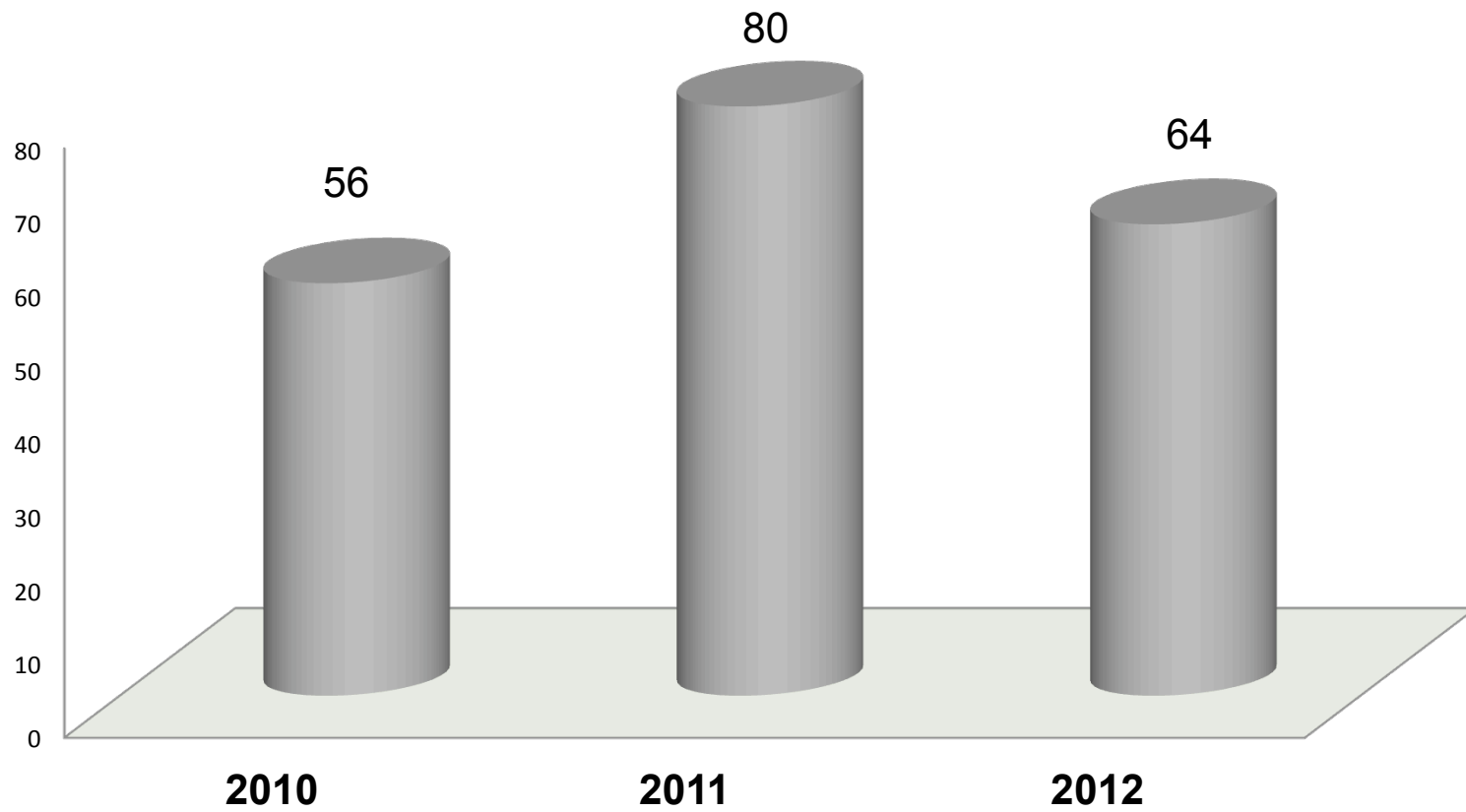
Total Manuscripts Waiting in Backlog



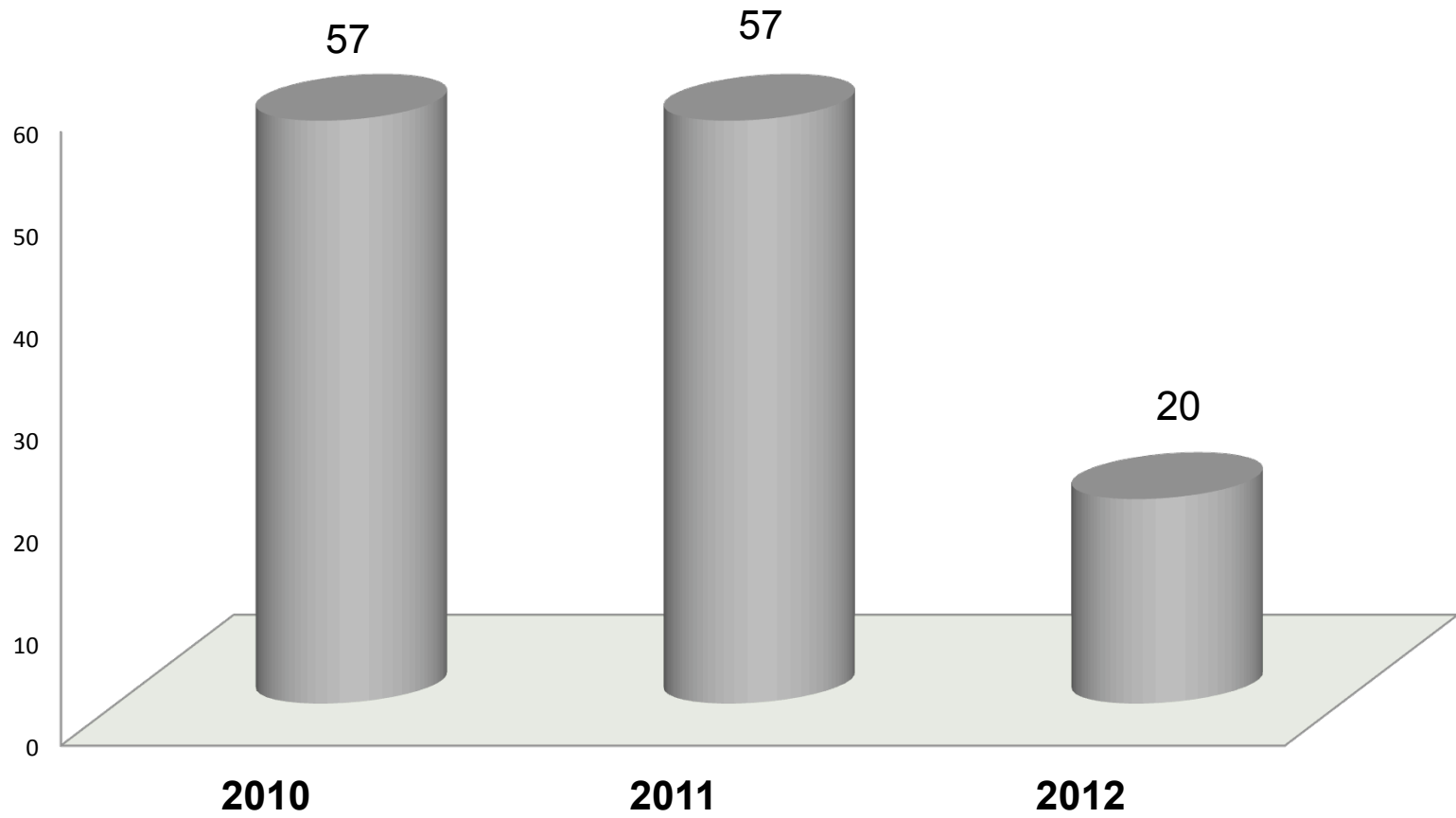
Total # of Unpublished Manuscripts



Manuscripts in Copyediting



Manuscripts in Typesetting





Editor-in-Chief: Cosimo Stallo

Executive Assistant: Judy Scharmman

Content

- Currently, the AESS QEB is published **4 times per year**:
 - January
 - April
 - July
 - October
- The QEB content includes:
 - **President's Message**
 - **Society News**
 - **Conferences**
 - **Education**
 - EVTS
 - Distinguished Lecturer Program
 - **Industry Relations**
 - **Membership**
 - Awards
 - Chapter News
 - Student Activities
 - **Publications**
 - Systems Magazine
 - Transactions
 - Tutorials
 - Website
 - **Technical Operations**

Publication cycle

- **1st day of January, April, July, and October – the QEB has to be published!!!!**

Main Deadlines Each Issue:

- January 2 – March 15; April 2 – June 15; July 2 – September 15; October 2 – December 15; – Editor needs to solicit articles for publication.
- As articles are submitted, edited and formatted.
- March 15, June 15, September 15, December 15 – Editor needs to send all edited final articles to Executive Assistant for inclusion in the QEB.
- March 28, June 28, September 28, December 28 – Finished product sent to Editor for final approval.



Fundamental 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 package: in this way, people can have a FULL VISION of our society;
- QEB can be used in order to anticipate the new articles to be published in Systems Magazine;
- QEB can be used in order to promote the Education Activities and in particular the new GOLD for GOLD ones;
- QEB can be used to promote IEEE AESS Workshops and Conferences;
- QEB is useful to inform AESS readers about open positions in Industry, Government or Academia.

Conclusions

The April Issue needs to be published. We are late!!!!

- **The publication deadlines are impossible to meet without enough content.**
- **If the officers would take the responsibility to send content each quarter, then we could spend our time in soliciting more creative content!!!!**

Please submit articles to the Editor !!!!!!!