

Growth Through Engagement and Teamwork

**Lance Kaplan**  
**VP – Publications**

**May 6-7, 2021**

**Virtual Board of Governors Meeting**

# Committee Members

- Lance Kaplan
- Mike Cardinale
- Fabiola Colone
- Michael Rice
- Roy Streit
- Sabrina Greco
- Alfonso Farina
- Stefano Coraluppi
- Peter Willett
- Dale Blair

# Outline

- Status
  - Transactions
  - Magazine
  - QEB
- Ongoing Activities
- New Journals
- Other Issues
- Motions (2)

# Status of T-AES

**Michael Rice, EIC**

**Gokhan Inalhan, Associate EIC**

**Lyudmila Mihaylova, Associate EIC**

# TAES News

- Michael Rice reappointed EiC on 1 Jan 2021 for second (and final) three-year term.
- New Associate EiCs appointed
  - Gokhan Inalhan (Cranfield Uni., UK)
  - Lyudmila Mihaylova (Sheffield Uni. UK)



# TAES News

- New Senior Editors
  - Peter Judd, Electro-optic and Infrared Systems (6 January 2021)
  - Lyudmila Mihaylova, Target Tracking and Multisensor Systems (27 December 2020)
  - David Garren, Electronic Warfare Systems (27 December 2020)
  - Hasan Mir, Signal Processing in Aerospace and Acoustic Systems (27 December 2020)

# TAES News

- New Associate Editors in 2021
  - Giancarmine Fasano, Avionics Systems (8 April 2021)
  - Graeme Smith, Radar Systems (12 March 2021)
  - Hao Xu, Intelligent Systems (5 February 2021)
  - Jason Gross, Navigation, (4 January 2021)
  - Ashwini Ratnoo, Guidance and Control Systems (4 January 2021)
  - Jiwon Seo, Navigation (6 January 2021)

# TAES News

## ■ New Associate Editors in 2020

- Florian Meyer, Target Tracking and Multisensor Systems (7 December 2020)
- Srikant Sukumar, Guidance and Control Systems (30 October 2020)
- Amit Sanyal, Guidance and Control Systems (30 October 2020)
- Ric Romero, Electronic Warfare Systems (21 October 2020)
- Chen-Fen Huang, Signal Processing in Aerospace and Acoustic Systems (27 September 2020)
- Kumar Vijay Mishra, Radar Systems (12 September 2020)
- Birsen Yazici, Radar Systems (4 September 2020)
- Yimin Zhang, Radar Systems (4 September 2020)
- Carmine Clemente, Radar Systems (4 September 2020)
- Marina Gashinova Radar Systems (4 September 2020)
- Xiaoli Bai, Space Systems (20 August 2020)
- Ran Dai, Space Systems (20 August 2020)

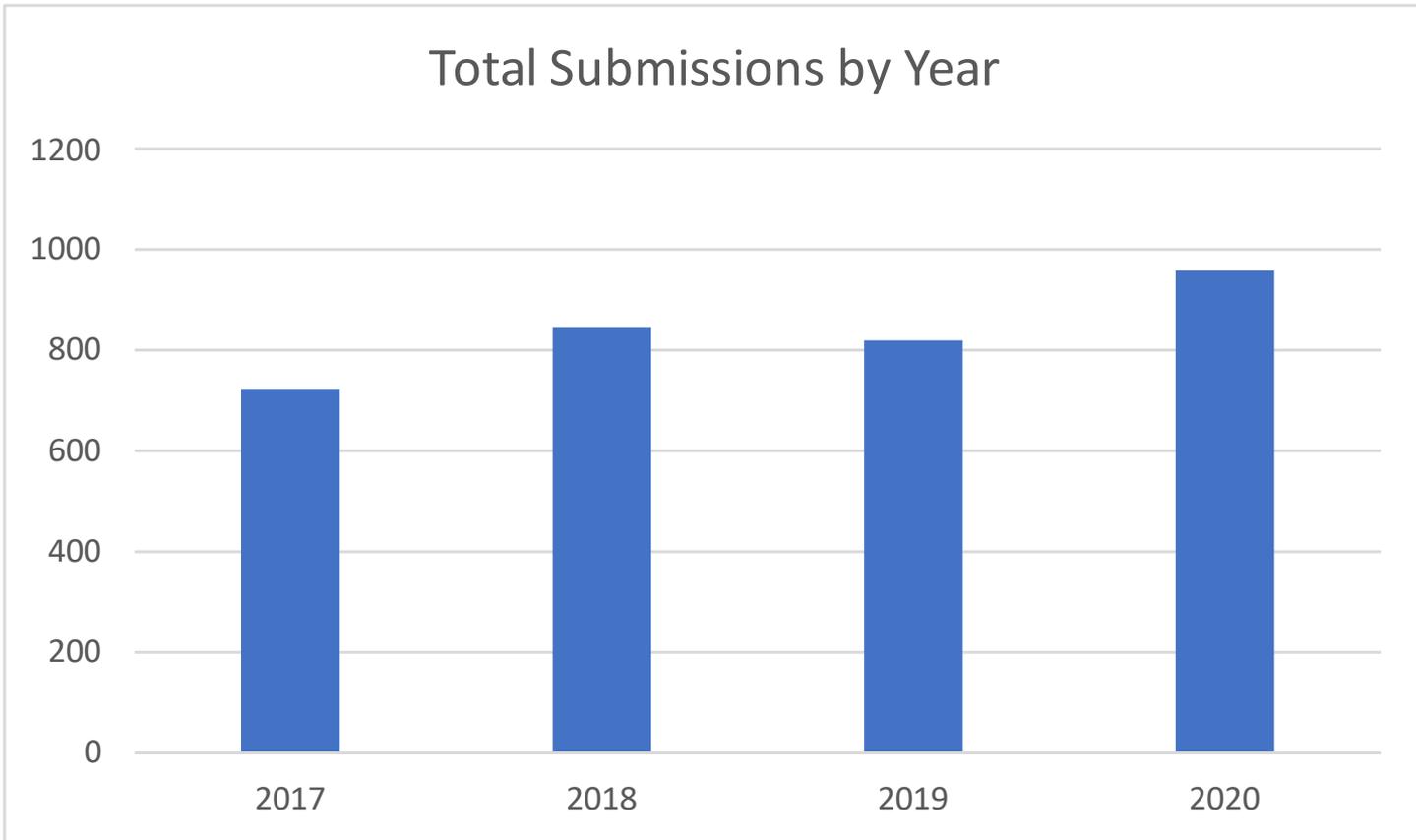
# TAES News

- New Associate Editors in 2020
  - Genshe Chen, Intelligent Systems (2 August 2020)
  - Patrick Girard, Fault Tolerant Systems (22 March 2020)
  - Brandon Jones, Space Systems (22 July 2020)
  - Athanassios Manikas, Signal Processing in Aerospace and Acoustic Systems (23 June 2020)
  - Tansel Yucelen, Guidance and Control Systems (13 May 2020)
  - Hyo-Sang Shin, Autonomous Systems (20 March 2020)
  - Mario Luca Fravolini, Guidance and Control Systems (9 March 2020)
  - Ming Xu, Space Systems (3 March 2020)
  - Daniel Clark, Target Tracking and Multisensor Systems (5 February 2020)
  - Peter Judd, Electro-optic and Infrared Systems (18 January 2020)

# M. Barry Carlton Award

- 2016
  - zero nominations
  - winner Farzad Hessar and Sumit Roy for their paper “Spectrum Sharing Between a Surveillance Radar and Secondary Wi-Fi Networks” (June 2016 issue of TAES)
- 2017
  - zero nominations
  - winner to be determined on or about 3 May 2021

# Number of Submissions to TAES



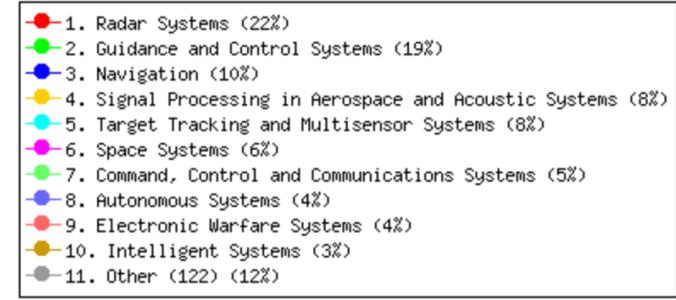
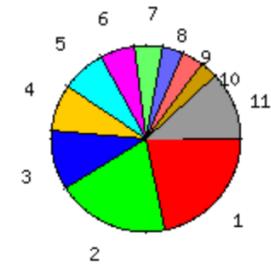
# Submissions by Technical Area for T-AES



Manuscript Categories Summary Report  
 1/2020 - 12/2020  
 Generated on April 12, 2021



Manuscript Category	Accepted	Withdrawn	Rejected	Pending	Total
<a href="#">Radar Systems</a>	63	4	99	52	225
<a href="#">Guidance and Control Systems</a>	48	2	96	42	200
<a href="#">Navigation</a>	22	0	58	23	108
<a href="#">Signal Processing in Aerospace and Acoustic Systems</a>	17	0	49	16	84
<a href="#">Target Tracking and Multisensor Systems</a>	19	2	37	15	80
<a href="#">Space Systems</a>	11	0	38	12	63
<a href="#">Command, Control and Communications Systems</a>	10	0	29	10	49
<a href="#">Autonomous Systems</a>	8	0	24	6	38
<a href="#">Electronic Warfare Systems</a>	11	0	15	11	38
<a href="#">Intelligent Systems</a>	4	0	18	8	31
<a href="#">Avionics Systems</a>	5	2	13	5	28
<a href="#">Energy Conversion Systems</a>	5	0	10	2	19
<a href="#">Fault Tolerant Systems</a>	8	0	6	2	16
<a href="#">Unknown/Other</a>	0	0	13	0	14
<a href="#">Electrooptic and Infrared Systems</a>	8	0	2	3	13
<a href="#">Networked Sensor Systems</a>	3	1	6	3	13
<a href="#">Special Section: Meta-Level and Adversarial Tracking</a>	1	0	2	8	11
<a href="#">Letters</a>	2	0	4	0	6
<a href="#">Sonar and Undersea Systems</a>	2	0	0	0	2



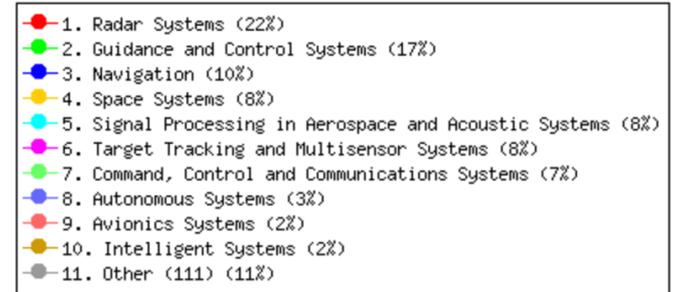
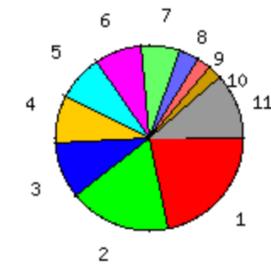
# Submissions by Technical Area for T-AES

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**Manuscript Categories Summary Report**  
1/2019 - 12/2019  
Generated on April 12, 2021



Manuscript Category	Accepted	Withdrawn	Rejected	Pending	Total
<a href="#">Radar Systems</a>	68	2	102	42	216
<a href="#">Guidance and Control Systems</a>	43	2	98	30	173
<a href="#">Navigation</a>	32	0	41	24	98
<a href="#">Space Systems</a>	19	3	51	8	84
<a href="#">Signal Processing in Aerospace and Acoustic Systems</a>	13	0	55	12	82
<a href="#">Target Tracking and Multisensor Systems</a>	27	1	39	9	81
<a href="#">Command, Control and Communications Systems</a>	23	0	36	7	67
<a href="#">Autonomous Systems</a>	11	1	19	2	34
<a href="#">Avionics Systems</a>	9	1	10	3	24
<a href="#">Intelligent Systems</a>	6	0	13	5	24
<a href="#">Fault Tolerant Systems</a>	6	1	13	3	23
<a href="#">Electronic Warfare Systems</a>	5	0	9	8	22
<a href="#">Energy Conversion Systems</a>	4	0	13	4	21
<a href="#">Electrooptic and Infrared Systems</a>	4	0	4	4	12
<a href="#">Unknown/Other</a>	3	0	9	0	12
<a href="#">Networked Sensor Systems</a>	4	0	5	1	10
<a href="#">Letters</a>	0	0	6	0	6
<a href="#">Special Section: Spectrum Sharing Systems</a>	2	0	1	1	4
<a href="#">Add Editors</a>	0	0	1	0	1



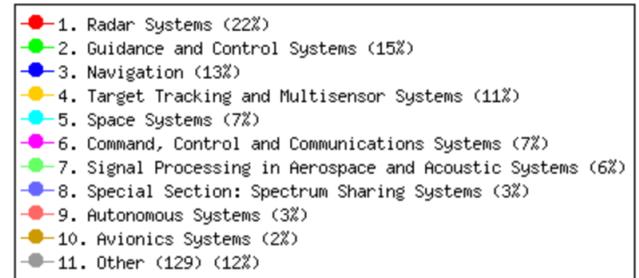
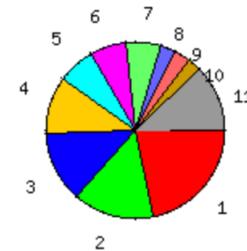
# Submissions by Technical Area for T-AES

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**Manuscript Categories Summary Report**  
1/2018 - 12/2018  
Generated on April 12, 2021



Manuscript Category	Accepted	Withdrawn	Rejected	Pending	Total
<a href="#">Radar Systems</a>	71	2	97	54	233
<a href="#">Guidance and Control Systems</a>	39	4	71	42	156
<a href="#">Navigation</a>	33	1	66	33	138
<a href="#">Target Tracking and Multisensor Systems</a>	26	1	51	31	114
<a href="#">Space Systems</a>	22	1	29	19	72
<a href="#">Command, Control and Communications Systems</a>	21	1	31	16	71
<a href="#">Signal Processing in Aerospace and Acoustic Systems</a>	9	0	41	17	69
<a href="#">Special Section: Spectrum Sharing Systems</a>	8	0	12	7	30
<a href="#">Autonomous Systems</a>	5	1	17	6	29
<a href="#">Avionics Systems</a>	8	0	12	6	26
<a href="#">Electronic Warfare Systems</a>	3	0	11	8	23
<a href="#">Intelligent Systems</a>	7	0	6	8	22
<a href="#">Fault Tolerant Systems</a>	5	0	11	4	20
<a href="#">Energy Conversion Systems</a>	3	0	6	5	15
<a href="#">Networked Sensor Systems</a>	4	0	9	2	15
<a href="#">Electrooptic and Infrared Systems</a>	4	0	4	2	11
<a href="#">Unknown/Other</a>	0	0	9	1	10
<a href="#">Letters</a>	1	0	4	0	5
<a href="#">Sonar and Undersea Systems</a>	4	0	0	1	5
<a href="#">Human-Machine Interface</a>	0	0	2	0	2
<a href="#">Support Systems</a>	0	0	1	0	1

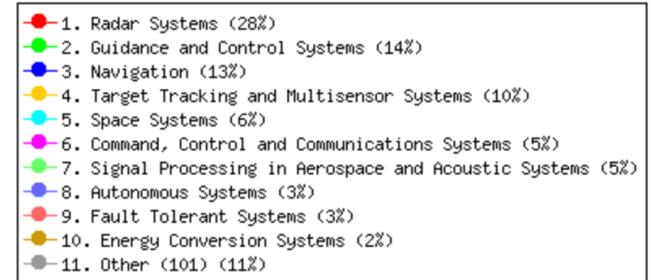
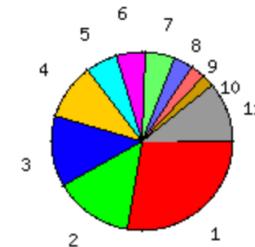


# Submissions by Technical Area for T-AES

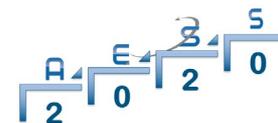
Manuscript Categories Summary Report  
1/2017 - 12/2017  
Generated on April 12, 2021



Manuscript Category	Accepted	Withdrawn	Rejected	Pending	Total
<a href="#">Radar Systems</a>	85	3	104	65	263
<a href="#">Guidance and Control Systems</a>	34	2	46	50	134
<a href="#">Navigation</a>	33	4	50	33	123
<a href="#">Target Tracking and Multisensor Systems</a>	30	1	32	29	98
<a href="#">Space Systems</a>	6	3	19	23	55
<a href="#">Command, Control and Communications Systems</a>	13	2	17	19	52
<a href="#">Signal Processing in Aerospace and Acoustic Systems</a>	18	2	22	7	50
<a href="#">Autonomous Systems</a>	5	1	19	7	32
<a href="#">Fault Tolerant Systems</a>	2	2	15	6	25
<a href="#">Energy Conversion Systems</a>	3	0	10	6	22
<a href="#">Avionics Systems</a>	3	1	5	9	18
<a href="#">Networked Sensor Systems</a>	7	0	8	2	17
<a href="#">Electronic Warfare Systems</a>	4	0	6	4	15
<a href="#">Electrooptic and Infrared Systems</a>	3	2	7	3	15
<a href="#">Intelligent Systems</a>	3	0	4	4	13
<a href="#">Unknown/Other</a>	2	1	5	0	8
<a href="#">Sonar and Undersea Systems</a>	1	0	1	5	7
<a href="#">Large-Scale Systems</a>	1	0	2	0	3
<a href="#">Letters</a>	0	0	1	1	2
<a href="#">Support Systems</a>	1	0	1	0	2
<a href="#">Human-Machine Interface</a>	0	0	1	0	1

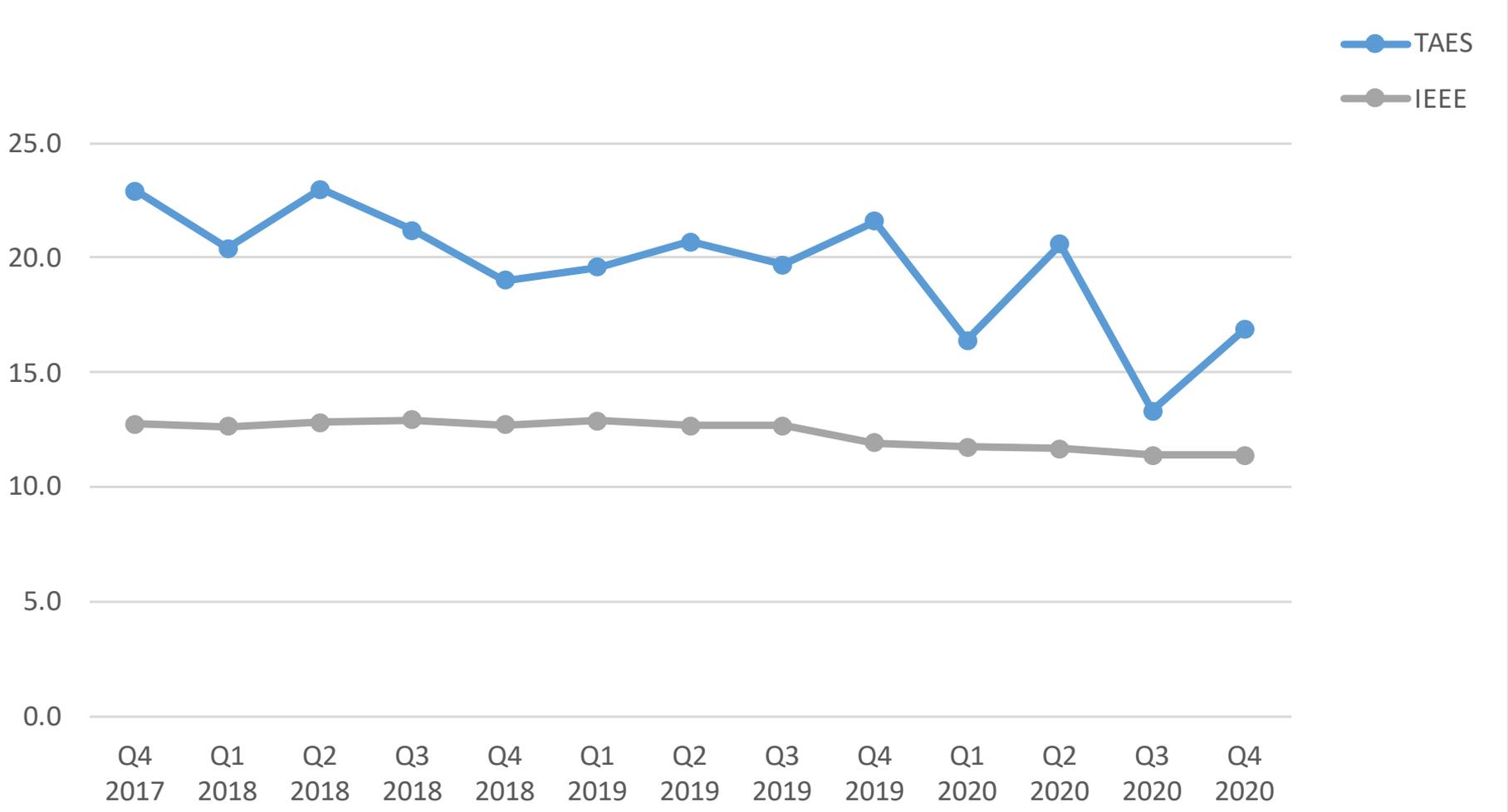


# Submissions by Country of Origin for T-AES (Top 20)

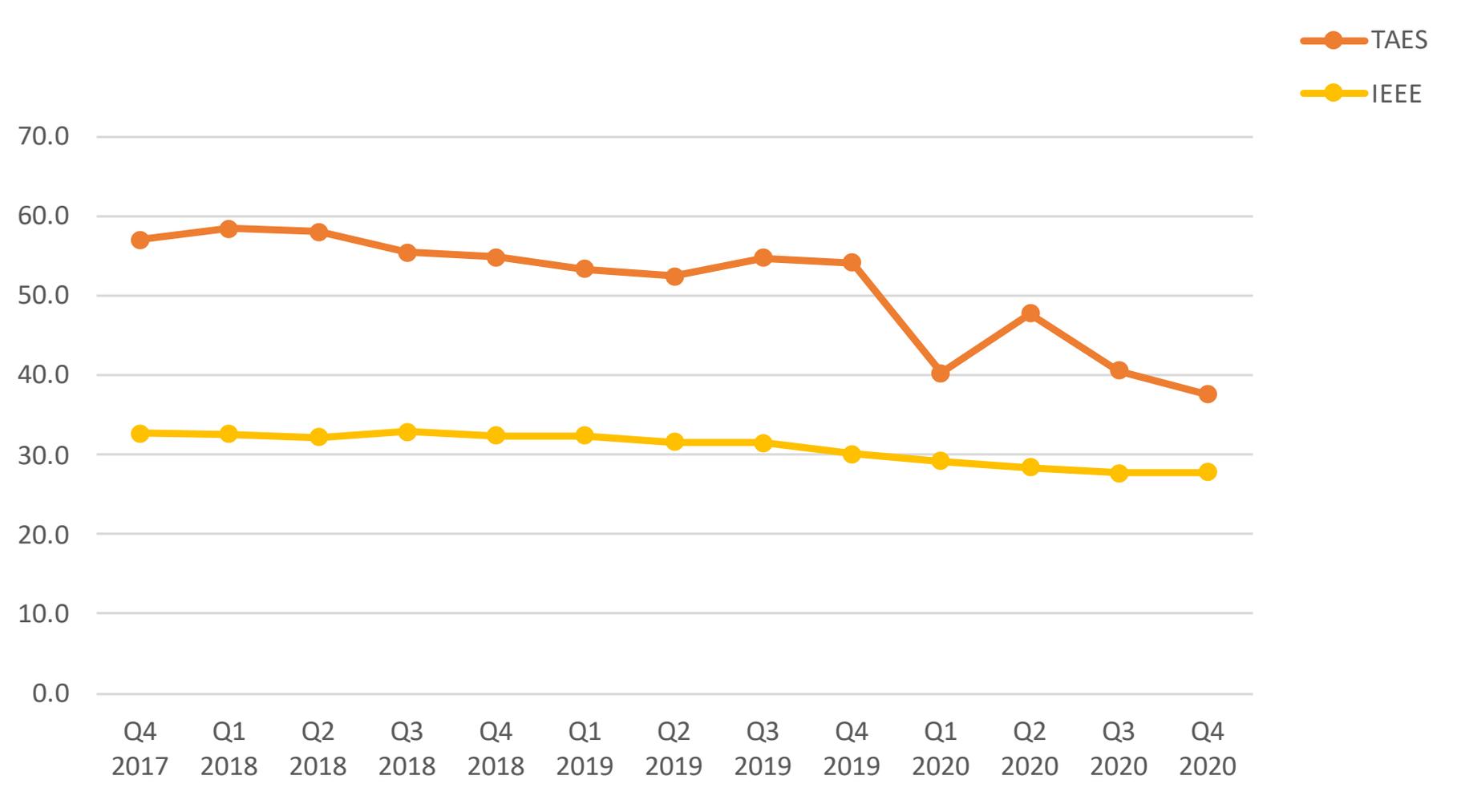


2017		2018		2019		2020	
China	282	China	365	China	347	China	430
USA	110	USA	132	USA	113	USA	124
Korea	38	Korea	43	India	47	India	48
Iran	34	Iran	40	Korea	43	Korea	37
India	30	India	34	Iran	42	Iran	35
UK	26	Italy	22	UK	26	Italy	31
Italy	25	UK	17	Italy	24	Canada	30
Canada	18	Australia	14	Brazil	22	Germany	22
Australia	16	Canada	14	Canada	22	UK	20
Turkey	15	France	14	Turkey	15	Australia	17
Brazil	13	Brazil	12	Australia	12	France	17
France	11	Spain	12	Egypt	11	Turkey	15
Germany	8	Germany	9	France	8	Brazil	13
Singapore	8	Japan	9	Pakistan	8	Israel	11
Spain	8	Taiwan	8	Israel	7	Spain	10
Saudi Arabia	6	Pakistan	7	UAE	7	Russia	9
Israel	5	Saudi Arabia	7	Germany	6	Taiwan	9
Pakistan	5	Egypt	6	Japan	6	Sweden	7
Sweden	5	Argentina	5	Singapore	6	Saudi Arabia	6
Greece	4	Finland	5	Hong Kong	5	Japan	5
Total <sup>16</sup>	723		846		821		959

## Average Number of Weeks to First Decision



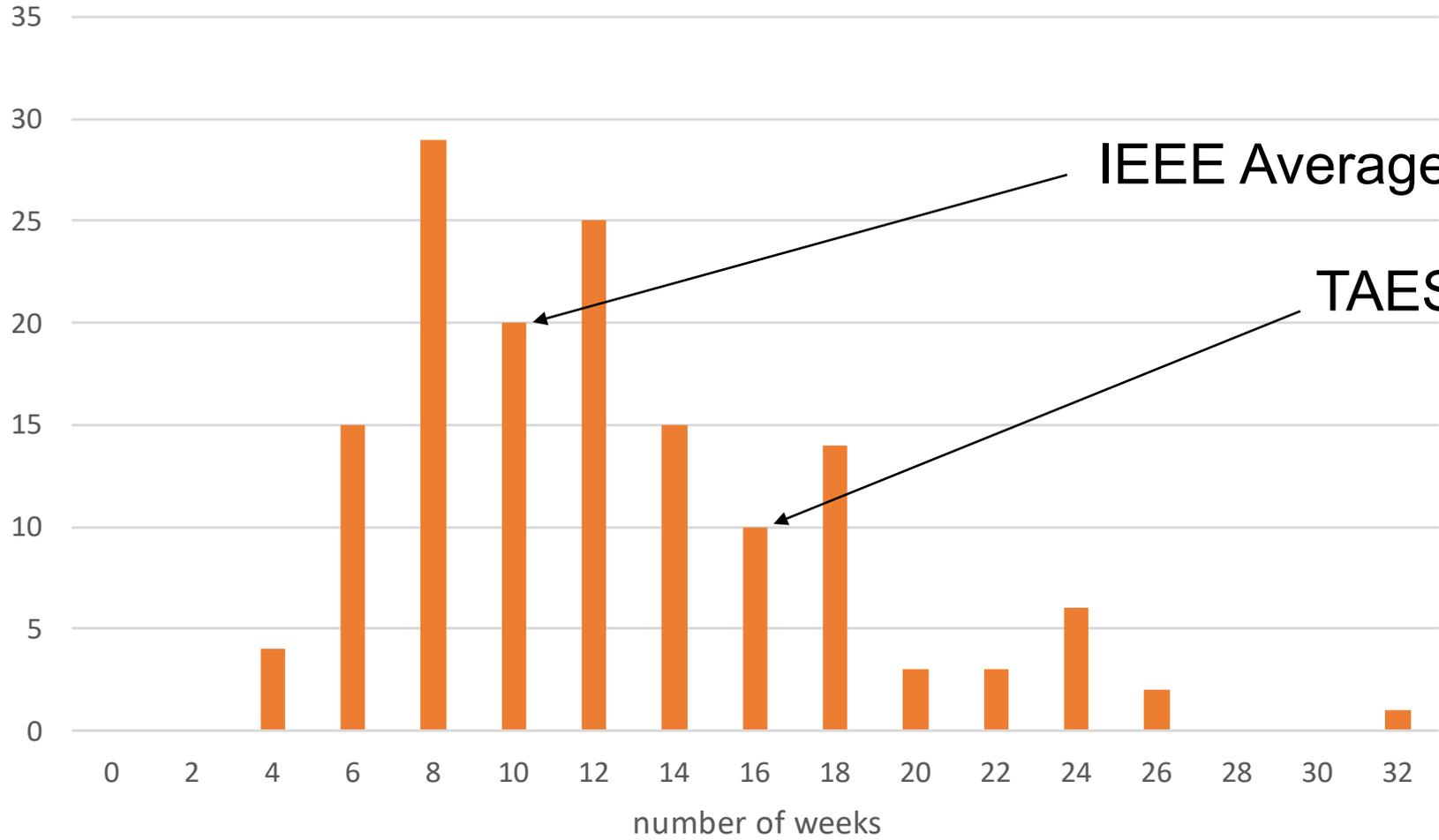
# Average Number of Weeks to Online Post



# Weeks to First Decision (all IEEE)

Q4 2020 Histogram

Frequency



# Status of AES Magazine

**Peter Willett, EIC**

**Daniel O'Hagan, Associate EIC**

**Dale Blair, AE for Tutorials**

# Update

- Tutorial XIV published March 2021
- Four tutorials papers currently under review
- Six special issues are currently in the works

# Recent Special Issues

- “Exploration Mission 1 and Deep Space CubeSats”
  - April 2019, September 2019, March 2020 (Davarian, Gao & Kinman)
- “Wireless Sensor Networks and Remote Sensing for Environmental Applications”
  - June 2019, October 2019 (Kanoun, Carminati, Marcuccio & Ullo)
- “Selected Methods and Techniques for Intelligent Systems for Space”
  - July 2019 (Moreno, Duncan & Bergman)
- “Cognitive Radar”
  - December 2019, June 2020 (Brueggenwirth, Huizing & Charlish)
  - Letter to the editor by Daum
- “Quantum Radar”
  - April 2020 plus November 2020 (Frasca, Farina & Balaji)
- “Noise Radar”
  - September 2020 plus October 2020 (Lukin, Stove & Wasserzier)

# Upcoming Special Issues

- “Artificial Intelligence for Data Fusion” (Chong, Koch & Fraenken)
  - 7 accepted, planned for July 2021
- “Current Applications and Innovations of Artificial Intelligence and Machine Learning in Aerospace” (Chang, Mohammed, Ramos, Kim)
  - 8 submissions
- “Multi-Platform and Multi-Functional RF Systems (MPRFS) and (MFRFS)” (O’Hagan, Fabrizio, Brandfass, Worms, Samczynski)
  - 3 accepted, 2 in revision
- “Systems and Solutions for Arctic Challenges” (Reese, McGee, Wilmington, Eicken, Mahoney, Bawden)
  - due July 2021
- “Space Domain Systems” (Blasch, Linares, Jah)
  - due July 2021
- “Urban Air Mobility and UAS Airspace Integration: Vision, Challenges, and Enabling Avionics Technologies” (Fazano, Crespillo, Sabatini, Roy, Ogan)
  - due November 2021

# Harry Mimno Award

- Best paper published in 2019.
- Winner
  - “An Overview of Cognitive Radar: Past, Present and Future,” by Sevgi Zubeyde Gurbuz from U Alabama (Tuscaloosa), Hugh Griffiths from UC London, Alexander Charlish from Fraunhofer, Murali Rangaswamy from AFRL, Maria Sabrina Greco from U Pisa and Kristine Bell from Metron [December 2019].
  - Had a strong package of endorsements
- Honorable mention:
  - RF Sensing Technologies for Assisted Daily Living in Healthcare: Comprehensive Review," by Syed Aziz Shah and Francesco Fioranelli from the University of Glasgow [November 2019].
  - "Passive Radar Tutorial," by Heiner Kuschel and Diego Cristallini from Fraunhofer, plus Karl Erik Olsen from the Norwegian DRE [February 2019 (Part II)].

# Other Things to Talk About

- Other Special Issue topics?
  - Suggestions and proposals from the BoG are welcome
- EiC turnover
  - normally Peter Willett would have handed off to Daniel O’Hagan for January 2021, but Daniel has asked for at least another six months and this is OK with VPP
  - Daniel (from Fraunhofer) takes over July 2021
- History articles
  - from Hugh Griffiths, very welcome: January, April, July, October
- Advertising
  - recent contact from John Bacon at Naylor
  - I was asked for a year’s worth of issue plans
  - I don’t have visibility for more than a couple of months, and publication issue placement of articles is determined by IEEE’s need for lower sub-to-pub times

# Update on Scope

## ■ *Present Scope:*

- *IEEE Aerospace and Electronic Systems Magazine* is a monthly magazine that publishes articles concerned with the various aspects of systems for space, air, ocean, or ground environments as well as news and information of interest to IEEE Aerospace and Electronic Systems Society members. The boundaries of acceptable subject matter has been intentionally left flexible so that the Magazine can follow the research activities, technology applications and future trends to better meet the needs of the members of the IEEE Aerospace and Electronic Systems Society. *IEEE Aerospace and Electronic Systems Magazine* articles apprise readers of new developments, new applications of cornerstone technology, and news of society members, meetings, and related items.

## ■ *Proposed Scope:*

- *IEEE Aerospace and Electronic Systems Magazine*, in its monthly printed issues, publishes articles concerned with the various aspects of systems for air, space, land or sea environments that are of general interest to IEEE Aerospace and Electronic Systems Society members. News, information, interviews, reviews and student highlights are also welcome. Speculative design projects are discouraged. The Magazine also publishes occasional Tutorial Issues that are distributed to members along with the month's regular issue; Tutorials are not intended as an outlet for novel content, but significant technical depth is expected.

# Other Notes

- Advertising
  - It appears that in order to “get into” companies’ advertising plans we may need to engage with them at the time of their annual budgeting exercises.
  - Also, many advertisers request “the coming year’s schedule of issues”. It is not clear how this can be accomplished when we aim at short sub-to-pub times, but there may be some appropriate flow of information that will help.
  - It is tentatively suggested to appoint an Advertising Editor to the Magazine to pursue these contacts. (Would this be a good idea?)
  
- Spotlight.
  - Some IEEE magazines have a feature that highlights popular society journal and conference publications.
  - This might be only a paragraph.
  - Popularity can be measured by downloads, citations, etc. ... and the article spotlighted need not be recent.
  - In many cases this turns out to be the most popular magazine feature – a service to the readers and a bump for bibliometrics.
  - One magazine increased its downloads by an order of magnitude when their “Spotlight” feature was introduced.
  - It is suggested to begin this feature. There should be a dedicated AE.

# Status of QEB

**Fabiola Colone, EIC**

# QEB Opens

Campaign Name	# Sent to	# Opened Email	% opened	# Bounced	# Unsubscribed	# Unique Clickers
AES Newsletter 1st Qtr 2018	4142	1397	34%	29	3	119
AES Newsletter 2nd Qtr 2018	3489	1097	31%	21	2	106
AES Newsletter 3rd Qtr 2018	3831	1288	34%	22	1	68
AES Newsletter 4th Qtr 2018	4056	1440	36%	40	6	20
AES Newsletter 1st Qtr 2019	4087	1464	36%	86	3	120
AES Newsletter 2nd Qtr 2019	3617	1146	32%	44	1	253
AES Newsletter 3rd Qtr 2019	3995	1046	26%	17	0	176
AES Newsletter 4th Qtr 2019	4221	1048	25%	1	1	254
AES Newsletter 1st Qtr 2020	4415	1023	23%	21	4	177
AES Newsletter 2nd Qtr 2020	3668	914	25%	3	2	117
AES Newsletter 3rd Qtr 2020	4075	879	22%	1	0	137

# QEB Initiatives

Initiatives are being implemented to improve the QEB and increase readership:

1. New inspiring articles for the section entitled **"The story behind a success"**
2. New interesting articles for the section entitled **"The History Column"** (by Hugh Griffiths)
3. New tool: **Conference Deadlines Tracker**
4. Highlights from **AESS BoG** (message from the President, meetings, new members)
5. Reports from **AESS Technical Panels** (by George Schmidt)
6. AESS members recognition: **Awards & Fellowships**

## The Story Behind a Success

In the hustle and bustle of daily life, we don't often stop to appreciate the path that led to this point in life. As the 2019 winner of the IEEE Fred Nathanson Memorial Radar Award, I'd like to take this opportunity to reflect on my own path and be thankful.



[Read Full Story](#)

## The History Column



Number seven in this series of historical developments is a quite remarkable German aircraft from WWI; fighter/bomber aircraft with a steel and laminated plywood airframe, powered by two turbojet engines, Walter and Reimer. Its maximum speed was close to 1,000 km/h. It looks for all the world like a modern



## Spotlight on: the AESS GlueTech Panel!

IEEE Senior Member Claudio Sacchi and IEEE Fellow Marina Ruggieri, contributors to the IEEE Aerospace and Electronics Systems Society's Glue Technologies for Space Systems Technical Panel, discuss how cloud computing is powering space travel on *IEEE Transmitter*.

[Read the Article Here](#)

## AESS Society Highlights

### AESS Officers' Strategic Planning Meeting 2021

The IEEE AESS Officers at the Strategic Planning Meeting held virtually this year on 4-5 February.



Why We're Using Cloud Computing for Space Exploration

# QEB Plans

- Include contents for **Industry** (maybe a new column?)
- Stimulate more inputs from AESS **Chapters**.
- Once we will have all these recurring contents in place, we should start thinking about modifying the **layout** of the QEB to make it more readable that as it is now within the body of the email → this could be an objective for next year.
- **Looking for an associate EiC**. Any volunteer?



# General Business

# Ongoing Activities

- Transition to ScholarOne MC
- Updating Information for Authors/Scope
- Operations Manual for TAES and AESM
- Coordination with technical panels for special section topics
- Active engagement with our editors to improve operations
- Recognize outstanding reviewers, editors and papers

# New Journals

- Transactions on Radar Systems
  - LOI to PerCom, Phase I is pending
  - AESS (28%), MTT (28%), SPS (20%)  
APS (8%), GRSS (8%), SC (8%)
  
- Open Access Journal on Systems Engineering
  - LOI to Percom, Phase I in June
  - SC (40%), SMCS (40%), AESS (20%)

# Other Issues

- Open Access
- Author Misconduct

## Motion I

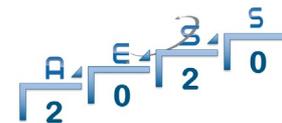
Move to budget \$550/year to pay for recognition of the top associate editors each year in TAES.

Anticipate 12~15 awards which includes a small (branded) gift, certificate and letter from EiC

Cost also includes shipment of the awards

## Motion II

- Move for AESS to commit to financially co-sponsor the proposed IEEE Open Access Journal on Systems Engineering with other IEEE units at the following levels: SC (40%), SMC (40%), AESS (20%).



# Thank You!