## Journal on Miniaturization for Airborne & Space Systems (J-MASS)

Systems Council AdCom John Schmalzel, EIC 26 APR 2018







#### **Outline**

- Brief history
- Next steps



#### Title and Launch

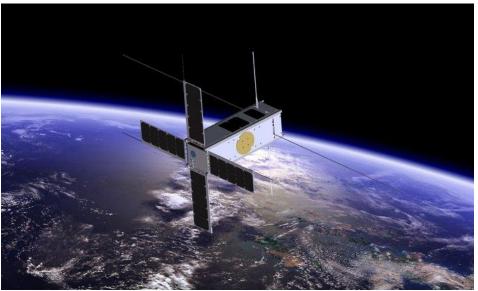
- Journal on Miniaturization for Airborne & Space Systems (J-MASS)
- To launch in 2019
- 4x per year, electronic only, available to all IEEE members, and non-members
- Pages per year: Year 1: 300; year 2: 450; year 3: 600 (Overlength >7pp)
- The tremendous growth in the numbers, complexity, and sophistication of highly miniaturized airborne and spaceborne systems, which include sensors and associated instrumentation, control, power, and guidance/propulsion systems, among many others, suggests that a dedicated publication for developers and users of such systems is warranted.
  All as stated in Phase 1

### Scope

This Journal addresses miniaturized sensor, instrumentation, control, and power systems for small air and space platforms.

- As stated in Phase 1







### Sponsorship

- Financial sponsors:
  - IEEE Systems Council: 35%
  - IEEE Geospatial & Remote Sensing: 25%
  - IEEE Sensors Council: 25%
  - IEEE Instrumentation & Measurement Society:
     10%
  - IEEE Aerospace & Electronic Systems Society:
     5%
- Technical co-sponsorship:
  - None planned at this time



Financials	2018	2019	2020	2021
REVENUE	2010	2013	2020	2021
Member, Student and General Interest Subscription Revenue		\$13,667	\$17,210	\$22,985
Non Member Revenue		\$0	\$350	
Non Member sub share of Corporate Infrastructure		\$0	(\$105)	· ·
Voluntary Page Charge		\$1,980	\$2,970	
Overlength Page Charge		\$6,300	\$9,450	
Periodical Package Program Revenue ( this co-pub gets no base)		\$3,307	\$20,159	\$34,748
TOTAL REVENUE	\$0	\$31,554	\$59,484	\$87,156
EXPENSE				
Fixed Expenses				
Promotion		\$ 5,000	\$ 5,000	\$ 5,000
EIC and editor travel (Panel of Editors, AdCom)		\$ 1,500	\$ 1,500	\$ 1,500
Xplore		\$6,200	\$6,200	\$6,200
ScholarOne Manuscripts	\$ 5,750	\$6,610	\$7,329	\$7,963
Editorial (Moderately Edited)		\$10,275	\$15,792	\$21,780
Information Conversion		\$900	\$1,344	\$1,800
Graphics		\$450	\$672	\$900
Editorial Assistant/Office		\$5,000	\$5,000	\$5,000
Publication Administration/ Indexing		\$1,593	\$2,379	\$3,186
Total Fixed Expenses	\$ 5,750	\$ 37,528	\$ 45,216	\$ 53,329
Financials	2018	2019	2020	2021
Variable Fulfillment Expenses				
Digital print copies for ASPP creation/mailing		\$924	\$1,020	\$1,452
Total Fulfillment Expenses		\$924	\$1,020	\$1,452
Other Variable Expenses				
Voluntary Page Charges		\$450	\$675	\$900
Overlength Page Charges		\$87	\$120	\$162
Bad debt for page charge collection		\$1,490	\$2,236	\$2,981
Total Other Variable Expenses		\$2,027	\$3,031	\$4,043
STOTAL EXPENSE	\$5,750	\$40,479	\$49,267	\$58,824
NET SURPLUS/(DEFICIT)	(\$5,750)	(\$8,925)	\$10,217	\$28,332

### **Next Steps: Staffing Up**

- Steering Committee
  - Chair, William (Bill) Emery (GRSS)
  - Treasurer, RC Rassa (SYS)
  - A. Plaza (GRSS)
  - P. Carbone (SYS)
  - F. Labeau (SENS)
  - J. Vig (SENS)
  - M. McShane (SENS)
- EIC
  - John Schmalzel, Rowan U.
- Asst. EIC
  - Lora Weiss, GA Tech Research Institute



### **Next Steps: Staffing Up AE's**

- **Systems** 
  - Antonio Moschitta, U. Perugia Alessandro Golkar, Airbus
  - John Blyler
- Sensors
  - John Vig
- **GRSS** 
  - Farid Melgani, U. Trento
- I&M
  - Kim Fowler, KSU
  - Reza Zoughi
- **AES** 
  - William (Dale) Blair, GTRI
     Peter Willet, U. Conn
- Others
  - Sangho Shin, Rowan U.

- McIntyre
- Lore Bruce, Miss. State
- Salvo Baglio, U. Catania



### Marketing: Paper Source(s)

- Sponsoring Society Members
- Universities
- Industry
- Government agencies
- Investigators specifically supported by Small Sat and UAV funding agencies (NASA, ESA, JAXA, others).

## All those involved with small air and space systems.

## **Marketing: Reaching Out**



## Marketing: Reaching Out

- Booth (Bill Emery)
- Direct marketing at related conferences
  - UAV
  - Small Sat Conf., Logan UT, AUG
  - Small Sat and Space Access Summit,
     MAY



#### The Ask

- Help identifying AEs
- Help with marketing—get the word out



## **Thank You!**

## Backup Slides



## Need (Included in Phase 1 template - please note any changes from Phase 1)

- From the reader survey:
  - 85.4%: Subject matter is growing
  - -83.3%: Subject matter still important in 10y
  - 73.9%: Intellectually interesting
  - 54.7%: Useful to me, personally
  - 11.3%: Already too many Journals in area
    - As stated in Phase 1



## Society/Council Response to Marketing Analysis

#### Responses:

- 638 responses of 3,784 IEEE members solicited (14.8%)
- 45.5% said likely to read the Journal, 24.6% said not
- 51.3% said they would personally subscribe, and another 19.9% said they would ask their institution to subscribe
- 89.3% said the Journal was good for Xplore

#### Likely to submit articles:

Among those who published in the past (61.1%), 31.7% said they were likely to submit 1 or more within 12 months

The sponsors believe that this is reasonably solid data that says the Journal would have a high likelihood of success. See narrative Form II for more detailed information.

# Alternative Publishing Mechanisms Explored (Included in Phase 1 template - please note any changes from Phase 1)

- Special issues, special sections, etc., are considered impractical because existing related publications (IEEE Sensors Journal, IEEE Systems Journal, and IEEE Transactions on Geoscience and Remote Sensing) have large backlogs, even with very low acceptance rates.
  - As stated in Phase 1



## Overlap with Existing Periodicals

(Included in Phase 1 template - please note any changes from Phase 1)

- IEEE Transactions on Geoscience & Remote Sensing
  - This is likely the Journal with greatest overlap, but their acceptance rate is exceptionally low (20%) which is part of the reason for their co-sponsorship – additional publishing opportunities for their members & interested authors
- IEEE Sensors Journal
  - Small overlap but as in above there is a low acceptance rate and their co-sponsorship provides additional publishing opportunities
- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (JSTARS)
  - Some overlap perceived, but as this is published monthly by GRSS, this is viewed as another publishing opportunity for GRSS members

Info updated from Phase I

## Overlap with Existing Periodicals (2)

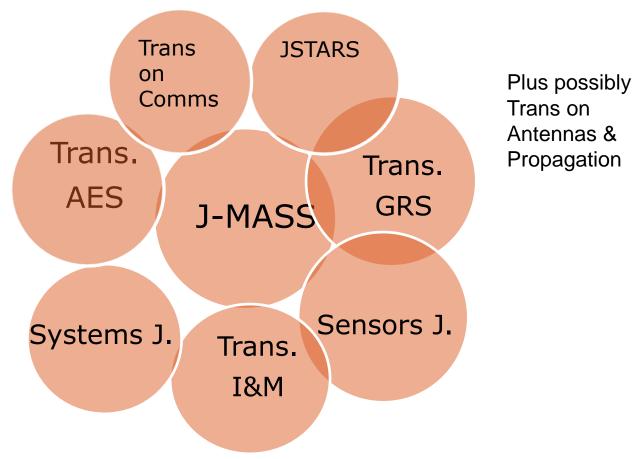
- IEEE Transactions on Communications
  - Small overlap noted by survey respondees
- IEEE Transactions on Aerospace & Electronic Systems
  - Small overlap suggested by survey; EIC of T-AES says that they can accept submittals on this topic but scan of recent articles shows none
- IEEE Transactions on Instrumentation & Measurement
  - Small overlap noted, but I&M Society is a sponsor with intent to provide additional publishing capability
- IEEE Sensors Journal
  - Small overlap perceived, although not noted in survey
- IEEE Systems Journal
  - Very minor overlap; scan of recent articles shows none
- IEEE Transactions on Antennas & Propagation
  - Minor overlap suggested by the survey



#### **EIC and Editor information**

- Editor-in-Chief: Dr. John Schmalzel, Professor of ECE, Rowan University, Glassboro NJ
  - Ph.D Engineering, Kansas State University 1980
  - MSEE Engineering, Kansas State University 1977
  - BSEE Engineering, Kansas State University, 1973
- Assistant Editor-in-Chief: Dr. Lora Weiss, Regents Researcher, University System of Georgia, and Chief Technology Officer & Deputy Director for Research, Georgia Tech Research Institute (GTRI)
  - Ph.D Engineering, Penn State University, 1993
  - MS Mathematics, University of California, LA, 1988
  - BS Mathematics, Boston University, 1985, magna cum laude

## Visual Landscape (Included in Phase 1 template - please note any changes from Phase 1)



Slight update from what was stated in Phase I

## Variance from Current Norms? (Included in Phase 1 template - please note any changes from Phase 1)

- Low deviation: digital-only vs. traditional paper publication
  - As stated in Phase 1

