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

### REVENUE

<table>
<thead>
<tr>
<th>Description</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member, Student and General Interest Subscription Revenue</td>
<td>$13,667</td>
<td>$17,210</td>
<td>$22,985</td>
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</tr>
<tr>
<td>Non Member Revenue</td>
<td>$0</td>
<td>$350</td>
<td>$375</td>
<td></td>
</tr>
<tr>
<td>Non Member sub share of Corporate Infrastructure</td>
<td>$0</td>
<td>($105)</td>
<td>($113)</td>
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</tr>
<tr>
<td>Voluntary Page Charge</td>
<td>$1,980</td>
<td>$2,970</td>
<td>$3,960</td>
<td></td>
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<tr>
<td>Overlength Page Charge</td>
<td>$6,300</td>
<td>$9,450</td>
<td>$12,600</td>
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<tr>
<td>Periodical Package Program Revenue (this co-pub gets no base)</td>
<td>$3,307</td>
<td>$20,159</td>
<td>$34,748</td>
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<tr>
<td><strong>TOTAL REVENUE</strong></td>
<td>$0</td>
<td>$31,554</td>
<td>$59,484</td>
<td>$87,156</td>
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</table>

### EXPENSE

#### Fixed Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
<td></td>
</tr>
<tr>
<td>EIC and editor travel (Panel of Editors, AdCom)</td>
<td>$1,500</td>
<td>$1,500</td>
<td>$1,500</td>
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<tr>
<td>Xplore</td>
<td>$6,200</td>
<td>$6,200</td>
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<tr>
<td>ScholarOne Manuscripts</td>
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<tr>
<td>Editorial (Moderately Edited)</td>
<td>$10,275</td>
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<tr>
<td>Information Conversion</td>
<td>$900</td>
<td>$1,344</td>
<td>$1,800</td>
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</tr>
<tr>
<td>Graphics</td>
<td>$450</td>
<td>$672</td>
<td>$900</td>
<td></td>
</tr>
<tr>
<td>Editorial Assistant/Office</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,000</td>
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<tr>
<td>Publication Administration/ Indexing</td>
<td>$1,593</td>
<td>$2,379</td>
<td>$3,186</td>
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<tr>
<td><strong>Total Fixed Expenses</strong></td>
<td>$5,750</td>
<td>$37,528</td>
<td>$45,216</td>
<td>$53,329</td>
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### Variable Fulfillment Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital print copies for ASPP--creation/mailing</td>
<td>$924</td>
<td>$1,020</td>
<td>$1,452</td>
<td></td>
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<tr>
<td><strong>Total Fulfillment Expenses</strong></td>
<td>$924</td>
<td>$1,020</td>
<td>$1,452</td>
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</table>

### Other Variable Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Page Charges</td>
<td>$450</td>
<td>$675</td>
<td>$900</td>
<td></td>
</tr>
<tr>
<td>Overlength Page Charges</td>
<td>$87</td>
<td>$120</td>
<td>$162</td>
<td></td>
</tr>
<tr>
<td>Bad debt for page charge collection</td>
<td>$1,490</td>
<td>$2,236</td>
<td>$2,981</td>
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<tr>
<td><strong>Total Other Variable Expenses</strong></td>
<td>$2,027</td>
<td>$3,031</td>
<td>$4,043</td>
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</tbody>
</table>

**TOTAL 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
  - John Blyler
  - Alessandro Golkar, Airbus

- Sensors
  - John Vig
  - John Vig - McIntyre

- GRSS
  - Farid Melgani, U. Trento
  - Lore Bruce, Miss. State

- I&M
  - Kim Fowler, KSU
  - Reza Zoughi
  - Salvo Baglio, U. Catania

- AES
  - William (Dale) Blair, GTRI
  - Peter Willet, U. Conn

- Others
  - Sangho Shin, Rowan U.
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.*

As stated in Phase 1
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

  - 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

Info updated from Phase I
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

Trans. AES
Trans. I&M
J-MASS
JSTARS
Trans. Comms
Trans. GRS
Systems J.
Sensors J.

Plus possibly Trans on Antennas & Propagation
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