

**MINUTES OF THE
SATELLITE DIVISION EXECUTIVE COMMITTEE MEETING
(September 24, 2010)**

Subject to the approval of the ION Satellite Division Executive Committee the following minutes are submitted. The Satellite Division Executive Committee Meeting was called to order on 24 September 2010 at Jake's Grill, Portland, Oregon at 6:30pm. Those present were:

VOTING COMMITTEE MEMBERS:

Pratap Misra	Chair
John Raquet	Vice Chair
Patricia Doherty	Treasurer & ION GNSS 2010 Program Chair
Demoz Gebre-Egziabher	Secretary
A.J. Van Dierendonck	Immediate Past Chair
Christian Tiberius	European Rep.
Andrew Dempster	Pacific Rim Rep.
Mikel Miller	ION President

NON-VOTING PARTICIPANTS:

GNSS 2010 Program Committee:
John Betz, Panel Chair
Anthea Coster, Technical Chair
Didier Flament, Technical Chair
Deborah Lawrence, Technical Chair
Martin Lopez, Technical Chair
Alexander Mitelman, Technical Chair
Mark Petovello, Technical Chair
In-Coming 2010-'12 Satellite Division Officers
Jade Morton, In-Coming Vice Chair
Tim Murphy, In-Coming Secretary
Paul Kline, In-Coming Treasurer
Jari Syrjarinne, In-Coming European Rep.
Allison Kealy, In-Coming Pacific Rim Rep.
Dorota Brzezinska, ION GNSS 2011 Program Chair
Don Venable, Robotic Lawn Mower Competition
Suneel Sheikh, Autonomous Snow Blower Competition
Frank van Graas, ION Meetings Chair
Lisa Beaty, ION Executive Director

AGENDA

1. Approve Minutes from September 2009: P. Misra
2. Ratify Motions Passed by E-mail in Past Year: P. Misra
3. Lessons Learned 2010 & Recommendations for 2011: P. Doherty
4. Approval of GNSS 2011 Program Chair: P. Misra
5. Sat Div Election Results: AJ Van Dierendonck

6. Confirmation of the In-Coming International Advisors: J. Raquet
7. Outreach Activities Status, Autonomous Lawn Mower Competition: D. Venable
8. Outreach Activities, Autonomous Snow Blower Competition: S. Sheikh
9. Closed Session: Satellite Division's Stewardship & Policies as it Relates to Satellite Division Finances

Approve Minutes from September '09

Motion: Approve September '09 Satellite Division minutes as circulated. Motion made by Pat Doherty, seconded by Christian Tiberius and passed by the committee.

Ratify Motions Passed by E-mail in Past Year

The following motions that were passed the previous year were reviewed and included in these minutes by way of information.

MOTION: The Satellite Division approved the revised ION GNSS Student Awards Policy dated October 2009. *Passed by the Satellite Division in October 2009.*

See Attached File: [ION GNSS Student Paper Award Policy Approved by the Satellite Division Executive Committee October 22, 2009.pdf](#)

MOTION: The commission on the ION GNSS meeting, paid to the Satellite Division, is amended as follows:

1. Beginning with ION GNSS 2010 (September 2010) the commission on the ION GNSS meeting will be paid at a flat rate of 5% of total conference revenue. This will allow the commission to expand and contract with the meeting's revenues. (This would equate to approximately \$50K in 2010 and will continue to support currently budgeted programs.)
2. The Division agrees that, in addition to the current programs currently budgeted from Satellite Division funds, the Satellite Division will now fund 100% of the ION GNSS Student Awards Program (including program expenses, awards and travel grants) from Satellite Division funds (the Division currently pays 50% of the student grants).
3. The Division authorize that the asset management fees for management of the Division's investment account be debited quarterly directly from the Fidelity account earnings. This will lessen the amount of cash required in the Division's liquid accounts.

Passed by the Satellite Division in August 2010.

Lessons Learned 2010 & Recommendations for 2011

The following was discussed taken:

See Attached File: [Lessons Learned 2010.pdf](#)

- It was noted that on several occasions that papers being presented were different than the abstracts that had been submitted. It was suggested that session chairs review final papers and any paper that was different than the abstract submitted for the meeting should not be included in the conference proceedings.
- It was noted that a few authors remarked that they never received any communication from their session chairs. It was suggested that the authors kit be updated to advise authors that if they had questions and found their session chairs to be non-responsive that they should seek the advice of their track chair.

Action: ION GNSS Authors Kit should be modified to include: 1) If author's final paper differs substantially from the initial abstract submitted for the meeting the paper will not be included in the final conference proceedings; and 2) Authors should be advised that if they have questions that are not answered by their session chair they should seek the advice of their track chair or the ION National Office.

Approve GNSS 2010 Program Chair

Motion: Dorota Brzezinska is appointed and approved as the ION GNSS 2011 Program Chair. Motion made by John Raquet, seconded by Pat Doherty and passed by the committee.

Satellite Division Election Results & GNSS Representative Proposal

It was reported that the Satellite Division Nomination Chair, Dr. AJ Van Dierendonck, had the following serve on this year's Satellite Division Nominations Committee: Pat Doherty, Per Enge, Chris Hegarty, and Todd Walter.

The Nominating Committee submitted the following nominations for this past summer's election:

Chair:	John Raquet
Vice Chair:	Gary McGraw Jade Morton
Secretary:	Anthea Coster Tim Murphy
Treasurer:	Paul Kline Sherman Lo

It was reported that the following were elected and will serve through the conclusion of the ION GNSS 2012 meeting:

Chair:	John Raquet
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Vice Chair: Jade Morton
 Secretary: Tim Murphy
 Treasurer: Paul Kline

Confirmation of the In-Coming International Advisors

The following international technical representatives were appointed by in-coming Satellite Division Chair, John Raquet, as voting members of the committee:

European Technical Advisor: Dr. Jari Syrjarinne
 Pacific Rim Technical Advisor: Dr. Allison Kealy

Dr. Raquet noted that he would be exploring the idea of having non-voting GNSS system advisors serve with the committee to represent Galileo, Compass, QZSS and GLONASS.

Motion: The Satellite Division Executive Committee approves the appointment of Dr. Jari Syrjarinne and Dr. Allison Kealy as voting International Technical Representatives. Motion made John Raquet, seconded by Pat Doherty and passed by the committee.

Outreach Status Activities Robotic Lawn Mower Competition

Don Venable, Robotic Lawn Mower Competition Chair reported that there had been six teams compete in 2009 and 14 teams compete in 2010. The increase was attributed to the student travel grants and the event publicity generated by the ION National Office. It was reported that while the competition was able to cover its direct costs with sponsorship there was still a need for travel grants to be funded for first time competitors.

Motion: The Satellite Division approves funding for two more years in the amount of up to \$20,000 per year for student travel grants (\$2,000 for first time US/Canadian schools and \$4,000 for first time international schools). Motion made by Pat Doherty, seconded by AJ Van Dierendonck and passed by the committee.

Outreach Proposal, Autonomous Snowplow Competition

Suneel Sheikh, Autonomous Snow Blower Competition Chair reported that the Satellite Division had sponsored the North Star Section's Robotic Snow Blower Competition in January 2010 and contributed \$1,000 for the same under the following conditions: 1) that the competition policies be amended to state that students must be participating on all teams; and 2) the North Star Section shall provide a follow-up report in September 2010.

Suneel reported that this past year they had been successful in securing new sponsors, gaining a healthy set of first year competitors, and improving the venue and competition fields. In addition to the ION's Satellite Division sponsors include: Lockheed Martin Corp., Honeywell Inc, ASTER Labs, Inc., The Hitching Post Motorsports, Alliant Techsystems (ATK) Inc., and

US Bank. It was reported that support from these sponsors should provide over half of the competition's awards and operational costs.

It was reported that for 2011 there are seven teams confirmed for the competition, including those from the University of Minnesota, Dunwoody College of Technology (two teams!), University of Michigan at Dearborn, Ohio University, GIRD Systems & Wright State University, and Miami University (several of these are also past Robotic Lawn Mower competitors, who should be strong contenders).

It was reported that the venue partner, the Saint Paul Winter Carnival, had been quite helpful in improving the overall competition. They have agreed to support the competition by blocking off an entire downtown city block where the competitors will compete directly on the street. The street option will provide a more realistic real world competition environment, as well as increased sky visibility for those intending to utilize GNSS signals. The Winter Carnival has offered to allow all the teams to participate in the downtown parade, which is held on late Saturday afternoon (after the first full day of competitions), and will give each team a chance to show off their school spirit to the public. The Science Museum of Minnesota is working with the committee to host the Student Presentations section of the competition.

It was reported that the committee is continuing to rework the budget with some final values yet to be determined and will provide this update on this soon. At this time the committee asked for financial support from the ION Satellite Division in the amount of \$10,000 to help support the January 2011 event.

In response to the \$10,000 funding request it was noted that Satellite Division Chair, Dr. Pratap Misra had circulated the following motion by e-mail the week prior to this meeting and the Satellite Division Executive Committee voted on and approved the following motion:

Motion: The Satellite Division approves a one-time grant of up to \$10,000 in support of the January 2011 Autonomous Snowplow Competition. The motion was made by Pratap Misra and approved by the Satellite Division via E-mail vote and ratified during this meeting.

Dr. Misra concluded the discussion by pointing out that the Snowplow Competition was a worthwhile outreach activity in which several of our colleagues had invested a great deal of time, energy, and that the Satellite Division can easily afford it. However, Dr. Misra noted that the Snowplow Competition looks too much like the Lawn Mower Competition and encouraged the Division to find something novel to do with the technology.

The ION GNSS Program Committee was dismissed at 9:00 p.m.

CLOSED SESSION

The in-coming and out-going Satellite Division Executive Committee convened in a closed session. The following were in attendance:

Pratap Misra, Chair
John Raquet, Vice Chair
Patricia Doherty, Treasurer
Demoz Gebre-Egziabher, Secretary
A.J. Van Dierendonck, Immediate Past Chair
Christian Tiberius, European Rep.
Andrew Dempster, Asian Rep.
Mikel Miller, ION President
Jade Morton, In-Coming Vice Chair
Tim Murphy, In-Coming Secretary
Paul Kline, In-Coming Treasurer
Jari Syrjarinne, In-Coming European Rep.
Allison Kealy, In-Coming Pacific Rim Rep.
Frank van Graas, ION Meetings Chair
Lisa Beaty, ION Executive Director

Satellite Division's Stewardship & Policies as it Relates to Satellite Division Finances

Lisa Beaty introduced the idea of the Satellite Division providing pre-conference tutorials for the ION GNSS 2011 meeting. The idea was discussed from both a business perspective as well as from a quality/cost of experience for the attendees.

There were strong opinions expressed by those who believed the Division did not want to provide tutorials as well as by those who felt the ION could provide a superior tutorial product.

Due to the lateness of the hour John Raquet, in-coming chair, accepted the action to follow up on this item with all in-coming officers within the next couple of weeks.

The meeting was closed at 10:00 p.m.