

**MINUTES OF THE
SATELLITE DIVISION EXECUTIVE COMMITTEE MEETING
(September 12, 2003)**

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 12 September 2003 at the Portland City Grill, Portland, Oregon at 6:30pm. Those present were:

VOTING COMMITTEE MEMBERS:

John Lavrakas	Chair
Elizabeth Cannon	Vice Chair
Pratap Misra	Secretary
Penny Axelrad	Immediate Past Chair
Guenter Hein	European Rep.
Hideyuki Torimoto	Asian Rep.

NON-VOTING MEMBERS:

A.J. Van Dierendonck	GPS/GNSS '03 General
Karen Van Dyke	GPS/GNSS '03 Program Chair
Charles Dixon	GPS/GNSS '03 Track Chair
Anna Jensen	GPS/GNSS '03 Track Chair
Brian O'Keeffe	GPS/GNSS '03 Track Chair
Maarten Uijt de Haag	GPS/GNSS '03 Track Chair
Chris Hegarty	GPS/GNSS '03 Track Chair & GNSS '04 Program Chair
Larry Hothem	ION President
Frank van Graas	Meetings Chair
Phil Ward	NAA Liaison
John Raquet	Out Reach Chair
Carl Andren	Technical Director
Lisa Beaty	Director of Operations

AGENDA

1. Lessons Learned '03 & Recommendations for '04
2. Approval of Chris Hegarty as GNSS 2004 Program Chair
3. Site Selection Update GNSS '06 & '07
4. Parkinson Award Update
5. Satellite Division Investment Strategy
6. Outreach Activities
7. Education Modules Update

8. NAA Update

Lessons Learned GPS/GNSS 2003 & Recommendations for 2004

Karen van Dyke reported that all the track chairs had done an excellent job. She also stated that Rob Conley had put a great deal of thought into the panel discussion. Guenter Hein suggested that the plenary speakers not be allowed to use visuals in their introductory remarks; this would encourage them to keep their opening statements brief. It was also strongly emphasized that the plenary session should be well balanced in terms of industry, the US military, Galileo, etc. and that the status of the programs should be covered in the plenary. It was the consensus of the committee that the plenary session should last no more than two hours (7-9pm).

Karen did note that there were too many paper cancellations and that there were actually a few holes in the program on the first day, which she did not find acceptable considering the paper rejection rate for the technical program. Guenter Hein stated that due to Galileo's implementation calendar it was obvious to him a few months prior to the meeting that there would be many European author and session chair cancellations. Karen suggested that the number of alternate papers be increased next year.

There were some complaints regarding a few authors that presented essentially the same paper more than once in the program, even though the initial abstracts had been quite different. The committee wondered if the author did this intentionally to increase the chances of having the paper presented. It was suggested that the database be pre-screened next year to look for authors that are giving multiple papers.

The need to increase the visibility of the military papers and military presence at the meeting next year was noted. The idea of a classified session at next year's meeting was supported.

Lisa Beaty reminded the Executive Committee that technical seminars supported by the Satellite Division are for the benefit of those attending the meetings. This criterion is used each year in evaluating proposals from companies desiring to provide seminars at the September meeting.

Approval of GNSS 2004 Program Chair

Motion: Chris Hegarty is appointed and approved as the GNSS 2004 Program Chair.
Motion made by John Lavrakas, seconded by Penny Axelrad and passed by the committee.

Site Selection Update GNSS '06 & '07

Lisa Beaty reported that per the action item given her in June she had sent site selection materials for '06-'07 to both Cannon and Hein (who were unable to be present at the June meeting). Lisa also reviewed with them the implications of the two sites and obtained committee member's preference.

Lisa provided September temperature information from the National Weather Service for Ft. Worth that had been a concern. She reported that she had all Ft. Worth contracts revised and completed with acceptable terms.

Motion: The Satellite Division approves Ft. Worth, Texas as the meeting location for ION GNSS '06 and '07 and authorizes Lisa Beaty to execute the appropriate contracts. Motion made by John Lavrakas, seconded by Elizabeth Cannon and passed by the division.

Parkinson Award Update

It was reported that in June 2003 the Satellite Division Executive Committee approved the Bradford W. Parkinson Award. It was also reported that Lisa Beaty had circulated the award criteria to the faculty list maintained by the National Office for comment. During that time it was noted that the ION was going to be proposing a new graduate student award, which would be funded at \$2500 per school, and it was suggested that the Satellite Division increase the honorarium associated with the Parkinson Award from \$2000 to \$2500. The Satellite Division Chair will form a committee to administer the award.

Motion: The Satellite Division to annually sponsor the Bradford W. Parkinson Award to an outstanding graduate student in the field of Global Navigation Satellite Systems (GNSS), the award to consist of a plaque and a \$2,500 prize with all other details as outlined in the Parkinson Award criteria. Motion made by John Lavrakas, seconded by Penny Axelrad and passed by the division.

See Attached File: [Parkinson_Award_REV_F.pdf](#)

It was suggested that efforts be made to have Brad Parkinson attend the September '04 meeting to present the award for the first time.

Satellite Division Investment Strategy

John Lavrakas reviewed the investment review document that was circulated to the committee.

See Attached File: [Investment_Strategy_Proposed_REV_B.pdf](#)

The Satellite Division acknowledged that they were comfortable with their current Fidelity investment mix as proposed and managed by Weber Asset Management. It was the consensus of the committee that assets could be transferred from checking to the investment account but that sufficient funds should remain in checking as to not make it necessary to liquidate investments on a regular basis.

Motion: The Satellite Division adopt the following strategy for cash and investment capital: hold enough in checking to cover twice its anticipated annual costs, currently committed liabilities and a new initiatives fund of \$20,000; invest remaining funds in a fairly conservative plan that protects most of the principal

but allows for growth. Lisa Beaty is authorized to transfer any remaining balance in the checking account to the Fidelity investment account for management by Weber using the current investment model. Motion made by John Lavrakas and passed by the division.

FYI: The motion above implied that a \$70,000 balance be maintained in the checking account:

- \$8,000 for two years of annual costs (currently Weber asset management fee)
- \$20,000 balance due on NAA project
- \$3,000 for purchase of two barometers for NAA project (see motion below)
- \$9,000 balance due on the Education Modules project
- \$20,000 new initiatives fund
- \$10,000 for the First Autonomous Lawnmower Competition (see motion below)

Outreach Activities

Frank van Graas, representing the Dayton Section of the ION, proposed that the Satellite Division sponsor the “First Autonomous Lawnmower Competition” to be held June 4-5, 2004 prior to the annual meeting in Dayton, Ohio. During this first competition, lawnmowers are expected to base their guidance solely on GPS technology. Financial support was requested from the division in the amount of \$10,000 for the administration, advertising, and prize money for the competition.

For complete contest rules and information see the attached file:

[lawnmower.pdf](#)

Motion: The Satellite Division approves \$10,000 to sponsor Dayton’s First Autonomous Lawnmower Competition. Motion made by John Lavrakas and passed by the division.

For competition rules see attached file:

[ION_Autonomous_Lawnmower_Competition_Rules.pdf](#)

Education Modules Update

Penny Axelrad reported that nine of the ten modules had been completed. She recommended that, should the division sponsor educational modules like this in the future, responsibility for completion should be put on the university and its faculty versus the students.

Penny requested that the ION add a link on the ION’s web site to the University of Colorado’s web site where the modules are also stored with an explanation that the link is being provided as the modules

were developed by the Satellite Division in cooperation with the University of Colorado and the National Science Foundation.

The ION was also asked to include a statement on the web site requesting feedback from those who used the modules with information on who used it and how it was used and that photographs would be especially useful. Lisa Beaty suggested that they could insert a field where people would have to include their name and contact information before being permitted to download the modules so that ION could easily follow-up with them. Carl Andren reported the ION has already received requests from two San Diego middle schools on the materials.

Action: ION National Office to provide link on the educational modules page to the University of Colorado's web site and provide note that the modules were developed in cooperation with the University of Colorado and the National Science Foundation.

Action: National Office to insert a required contact information field on the web site that shall be required to obtain the modules from the web site and an invitation to those downloading the modules to provide feedback on how the modules were used.

Action: John Lavrakas agreed to author a press release on the availability of the education modules for general distribution.

NAA Update

Phil Ward, ION/NAA Liaison reported that NovAtel was selected in January '03 to develop the GPS differential system for use by the NAA, in establishing straight course speed records for aircraft in flight, in cooperation with Trevor Brophy (University of Calgary's cooperative student hired by NovAtel for this purpose). Trevor provided the division with a current status of his work, which is expected to be complete by May '04. Phil reported also that NovAtel will fund three days of Trevor's time to support flight testing. See Attached File: [NAA_Status_Report_Sept.pdf](#)

A request was made of the Satellite Division to finance two barometers that will be included in the system at a total cost of \$3000.

Motion: The Satellite Division approves an additional \$3000 for the NAA project to subsidize the purchase of two barometers. Motion made by John Lavrakas and passed by the division.

The meeting was adjourned at 9:50pm.