MINUTES OF THE
COUNCIL MEETING
January 22, 2024

Subject to the approval of the ION Council, the following minutes are submitted. The Council Meeting was called to order on January 22, 2024 at 5:30 p.m. PST at the Hyatt Regency Long Beach, Long Beach, California, with some participating virtually. Those present were:

**VOTING COUNCIL MEMBERS:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Held</th>
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<tbody>
<tr>
<td>Sherman Lo</td>
<td>President</td>
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<tr>
<td>Gary McGraw</td>
<td>Executive Vice President</td>
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<tr>
<td>Frank van Graas</td>
<td>Treasurer, Past President</td>
<td>Participating Virtually</td>
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<tr>
<td>Jacob Campbell</td>
<td>Eastern VP</td>
<td>Participating Virtually</td>
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<tr>
<td>Alex Stratton</td>
<td>Western VP</td>
<td>Participating Virtually</td>
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<tr>
<td>Sandy Kennedy</td>
<td>Satellite Division Chair</td>
<td>Participating Virtually</td>
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<tr>
<td>Frank van Diggelen</td>
<td>Immediate Past President</td>
<td>Participating Virtually</td>
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<tr>
<td>Sabrina Ugazio</td>
<td>Eastern Council M-at-L</td>
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<td>Juan Blanch</td>
<td>Western Council M-at L</td>
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<tr>
<td>Fabio Dovis</td>
<td>Technical Representative</td>
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<td>David DeLorenzo</td>
<td>Technical Representative</td>
<td>Participating Virtually</td>
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<td>Joanna Hinks</td>
<td>Technical Representative</td>
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<td>Okaury Osechas</td>
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<td>Kirsten Strandjord</td>
<td>Technical Representative</td>
<td>Participating Virtually</td>
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<td>Richard Langley</td>
<td>Publications Chair</td>
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<tr>
<td>Jason Rife</td>
<td>Finance Chair</td>
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<tr>
<td>Charles Schue</td>
<td>Fellow Selection Chair</td>
<td>Participating Virtually</td>
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<tr>
<td>Tim Murphy</td>
<td>Bylaws Chair</td>
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<tr>
<td>Keith MacDonald</td>
<td>New England Section Chair</td>
<td>Participating Virtually</td>
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<tr>
<td>Mitch Narins</td>
<td>DC Section Chair</td>
<td>Participating Virtually</td>
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<tr>
<td>Chris Hegarty</td>
<td>Past President</td>
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<td>Larry Hothem</td>
<td>Past President</td>
<td>Participating Virtually</td>
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<tr>
<td>Jade Morton</td>
<td>Past President</td>
<td>Participating Virtually</td>
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<tr>
<td>Todd Walter</td>
<td>Past President</td>
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</tbody>
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**NON-VOTING PARTICIPANTS:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position Held</th>
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<tbody>
<tr>
<td>Lisa Beaty</td>
<td>Executive Director</td>
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<tr>
<td>Daphna Enzer</td>
<td>PTTI Representative</td>
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It was determined that a quorum was achieved.

It was noted that for those voting virtually, only objections would be recorded.

**AGENDA**

See attached file: Agenda Council September 2024

**Approve September 11, 2023 Council Meeting Minutes:** S. Lo
Motion: Council approves the September 11, 2023 Council Meeting Minutes as circulated. Motion made by Sherman Lo, seconded by Gary McGraw, and passed by the Council.

President’s Report: S. Lo

See attached file: President’s Report 1-22-24

Dr. Sherman Lo, ION president, advised Council that the Executive Committee had taken the following actions since the Council had last met in September of 2023:

- The ION’s FY 2024-25 budget was approved for presentation to the Council. A copy was made available for advance viewing and this will be covered as part of the Treasurer’s Report. (January 2024)
- The Executive Committee approved the recommendations/elections made by the 2023 Annual Awards and 2024 Fellows Committees. (November 2023) It was noted that the Council would receive reports and formally endorse award winners and newly elected Fellows later in this meeting.
- The Executive Committee approved the declaration of October 23 (10.23) as International GNSS Day. (October 2023)
- The Executive Committee approved the ION’s Audited Financial Statements and Management Letter from the Han Group. (September 2023)
- The Executive Committee authorized a $33,000 contribution to IEEE AESS from the IEEE/ION PLANS 2023 conference; and approved Salt Lake City, Utah as the location for the IEEE/ION PLANS 2025 event. (July 2023)

Motion: Council ratifies President Sherman Lo’s appointment of Dr. Andrew Neish to serve as ION’s ITM 2025 Program Chair and Dr. Josef Vojtech as ION’s PTTI 2025 Program Chair. Motion made by Sherman Lo, seconded by Gary McGraw, and passed by the Council.

Dr. Lo summarized his goal for his term of office as increasing young people’s participation in navigation. He summarized what ION is doing now as follows:

1. ION’s Existing Student Outreach Programs (within the ION’s community)
   - Meeting Registration Grant Program
   - ION GNSS Student Paper Competition
   - Section Scholarship Programs
   - Online Technical Tutorials
   - Basics Satellite Navigation (Enge) and GPS/GNSS and Inertial Nav (Farrell)
   - Numerous YouTube tutorials from NAVIGATION and ION webinar programs

2. Making Navigation Accessible to Youth Outside the ION’s Community
   - Africa Outreach Program
   - Autonomous Snowplow Competition
   - International GNSS Day
   - Learning Modules Secondary Education
   - ION Navigation Education Lesson Plans, Hands-on done with NSF
Dr. Lo reported that new initiatives to help promote young people’s participation in navigation to date included a student mixer that would be hosted at this ITM/PTTI 2024; and plans to promote International GNSS Day in 2024.

Dr. Lo invited Council to generate ideas and openly participate in these initiatives.

**Executive VP Report: G. McGraw**

Dr. Gary McGraw noted he did not have a formal report.

**Treasurer’s Report: F. van Graas**

See attached files:  
- Audited Financial Statements 3-31-23  
- Management Letter 3-31-23  
- Budget 2024-25  
- Conflict of Interest Disclosure Form  2024  

Dr. Frank van Graas, ION treasurer, reviewed the prior year’s Audited Financial Statements and reported these had been reviewed and approved by the ION Executive Committee in September 2023. It was further reported that the ION’s programs had recovered completely from COVID-19 downturn and had all returned to pre-COVID performance and in some instances had set new records. It was reported that the ION’s year end net gain/loss continued to be affected by the ION’s large financial reserve/investment accounts and the market value of these accounts recorded as of 3/31. It was reported that all regulatory filings were current and the auditors had no recommendations for the Council rising to the level required to be noted in the management letter.

Additionally, all transfers from the Operating Fund to the Long-Term investment fund that were authorized in April 2023 ($700K total) have now been completed.

**MOTION:** The Council approve the FY 2022-23 Audited Financial Statement and Management Letter. Motion made by Serman Lo, seconded by Jason Rife, and passed by the Council.

**MOTION:** The Council approve the engagement of the Han Group, Janet McDaid, Principal, to perform the ION’s 2023-24 audit and prepare the IRS 990 and VA500. Motion made by Tim Murphy, seconded by Chris Hegarty, and passed by the Council.

**MOTION:** Council approves the transfer of $500K from the Operating Account to the Long-Term Account over the next five months in $100K increments. Motion made by Jason Rife, seconded by Tim Murphy, and passed by the Council.

Dr. van Graas reviewed highlights of the proposed FY 2024-25 budget with Council that included the following:

- Membership: Membership has fully recovered to pre-COVID levels with 2600 members.
No increase in dues were proposed. Budget includes Reserve Fund allocation for all direct journal expenses as authorized during the September 2023 Council meeting (it does not include allocation for salaries/overhead).

- Meetings: The inflationary pressure meeting budgets were experiencing were discussed generally. It was stated that the meeting budgets assumed a return to fully in-person events and on-demand programs would continue to be reduced. The budget did not include an increase in attendee registration fees.
- Other items that were noted included an increase in overhead and administrative costs generally. It was noted the budget included a 5.2% cost of living adjustment for staff.
- New initiative budget included promotion of International GNSS Day, staff travel and training for full-time staff to attend Pacific PNT (April 2024), and replacement of some aging audio-visual equipment.

MOTION: Council approves the 2024-25 Budget as submitted. Motion made by Frank van Graas, seconded by Fabio Dovis, and passed by the Council.

2024 Conflict of Interest Disclosure Forms were distributed.

Eastern Region VP Report: J. Campbell

Dr. Jacob Campbell, Eastern Region VP, reported on activities on the Dayton, New England, and DC Sections. See the ION Newsletters for details.

Western Region VP Report: A. Stratton

Dr. Alex Stratton, Western Region VP, noted that he did not have a report.

Annual Awards Committee Report: M. Meurer

See attached file: Annual Awards Committee Report 2023

The 2023/24 Awards Committee was comprised of: Dr. Michael Meurer (Chair), Dr. Penina Axelrad, Ryan Dupuis, Ernesto Etienne, Marco Falcone, Dr. Li-Ta Hsu, Dr. Jiyun Lee, Dr. Tyler Reid, and Dr. Joe Rushanan.

Note that Dr. Jiyun Lee and Dr. Tyler Reid, who were nominated for an award, were not provided with the nomination or voting information pertaining to the award for which they were nominated; and were recused from voting for the award for which they were nominated including all discussions within the awards committee concerning these awards.

The committee selected the following as their recommendations of the proposed recipients of the Institute of Navigation’s Annual Awards.

Per Enge Early Achievement: Dr. Tyler Gerald René Reid
Superior Achievement: Captain Laura D. Norton
PTTI Distinguished Service Award: Francine M. Vannicola
P.V.H. Weems: Paul C. Manz
Burka Award (selected by the editor and associated editors of *NAVIGATION*):
Dr. Daniele Borio for his paper published in the Winter 2023 issue of *NAVIGATION: Journal of the Institute of Navigation*:

The Annual Award Selection Committee’s recommendations were approved by the ION Executive Committee, by e-mail vote in November 2023.

**Motion:** Council ratifies the recommendation of the Annual Awards Committee of the proposed recipients of the 2023 Annual Awards, as outlined above. Motion made by Chris Hegarty, seconded by Todd Walter, and passed by the Council.

It was noted that committee members to serve on the 2024 Annual Awards Committee are still being confirmed; once confirmed the chair shall forward these to the Executive Committee for approval and Council will ratify the full 2024 Annual Awards Committee membership at the September Council meeting.

**Fellow Selection Committee Report:** C. Schue

See attached file: Fellow Committee Report 2024

Charles Schue, 2024 Fellows Selection Committee chair, reported the selection committee had consisted of the following ION Fellows and president approved member: Charles Schue (chair), Dr. Jade Morton, Logan Scott, Doug Taggart, Dr. José Ángel Ávila Rodríguez, and Dr. Joe Rushanan.

It was reported that the committee evaluated seven strong nominees for election to Fellow status in 2024. After due deliberation, the Selection Committee completed their work by endorsing three nominees. Those recommended are:

- **Dr. Sanjeev Gunawardena**  
  For contributions to the innovation, education, standardization, and proliferation of satnav software-defined receiver tools and technology

- **Dr. Keith McDonald**  
  For contributions to navigation warfare testing and PNT situational awareness; and for sustained thought leadership and management impact in military positioning, navigation, and timing

- **Dr. Susan Skone**  
  For sustained contributions to the advancement of geospace studies using GNSS and related subjects; and for her selfless services to the broader community
The Fellow Selection Committee’s recommendations were approved by the ION Executive Committee by e-mail vote in November 2023.

**Motion:** Council ratifies the approved 2024 Fellows as outlined above. Motion made by Fabio Dovis, seconded by Joanna Hinks, and passed by the Council.

It was noted that the following had been approved in January 2023 to serve on the Fellows Selection Committee next year: Mr. Charles Schue (Chair), Dr. Y. Jade Morton, Dr. Jose Angel Avila-Rodriguez, Mr. Logan Scott, Mr. Doug Taggart, and Dr. Joe Rushanan.

**Nominating Committee Report, Committee Approval:** F. van Diggelen

Dr. Frank van Diggelen, chair of the Nominating Committee proposed the following serve as the 2025 Nominating Committee:

- **Chair:** Dr. Frank van Diggelen
- **Eastern Region:** Dorota Grejner-Brzezinska, Chris Hegarty, and Sabrina Ugazio
- **Western Region:** Penny Axelrad, Paul McBurney, and Tom Powell

**Motion:** Council approve the 2025 Nominating Committee as follows: Dr. Frank van Diggelen (Chair); with Dorota Grejner-Brzezinska, Chris Hegarty, and Sabrina Ugazio from the Eastern Region; and Penny Axelrad, Paul McBurney, and Tom Powell from the Western Region. Motion made by Frank van Diggelen, seconded by Okuary Osechas, and passed by the Council.

**NEW BUSINESS**

There was a discussion about the virtual meeting programs and decisions were made to continue various virtual elements of the virtual programs. Beaty reviewed the decision made by the Satellite Division Executive Committee regarding ION GNSS+ and that ITM/PTTI followed this precedent.

There was discussion about the video presentations. Beaty reported the advantages of video requirements included: 1) speakers arrived to meetings prepared; 2) the cancellation rate had decreased substantially as presentations were prepared in advance; 3) authors were able to take advantage of the networking opportunities at the meeting instead of preparing presentations; and 4) attendees viewed a substantial number of presentations during the event.

Todd Walter noted that ION needed to make the viewing statistics more visible to the membership/authors themselves.

**ACTION:** ION to add the number of times a video has been viewed remotely to AMP so authors can see the number of views their virtual presentation has received.

Daphna Enzer suggested that ION use some of the reserve funds to fund travel for keynote speakers. Beaty reported that this was in place for the larger ION GNSS+ meeting but had not
worked down to ITM/PTTI yet.

The meeting adjourned at 7:00 p.m. PST.

Additional documents included with these Minutes:

2024 ION Calendar