Subject to the approval of the ION Military Division Officers, the following minutes are submitted. The meeting of the Military Division Officers and Government Liaisons was called to order on July 13, 2018 in Long Beach, California at 8:00 a.m. Those present (in person or via teleconference) were:

VOTING COMMITTEE MEMBERS:
   Elliott Kaplan, Chair
   John Langer, Vice Chair

NON-VOTING GOVERNMENT LIAISONS:
   Jan Anszperger
   Bill Bollwerk
   David Chapman
   Eddy Emile
   John Del Colliano
   Sharon Donald
   Greg Graham
   Paul Olson
   Tom Powell
   Neeraj Pujara
   Greg Reynolds
   Joe Schnecker
   Fay Spellerberg
   Ben Wash
   David Wolfe

OTHER PARTICIPANTS:
   Kevin Coggins, Warfighter Panel Co-chair
   John Raquet, ION President
   Lisa Beaty, ION Executive Director

It was noted that a telecon of the Military Division Officers and Government Liaisons was held on June 20, 2018 during which the proposed nominations of Dr. Greg Reynolds and Mr. David Wolfe as Military Division Liaisons were discussed and approved. Those participating in the June 20 telecon included: Anszperger, Bollwerk, Chapman, Del Colliano, Kaplan, Mapar, Olson, Raquet, Spellerberg and Wash. It was also reported that Beaty had received emails from Graham, Pujara and Schnecker with their affirmation of extending invitations.
Following the telecon, Elliott Kaplan, Military Division Chair, issued invitations to both Reynolds and Wolfe to join the Military Division as Government Liaisons. Both Reynolds and Wolfe accepted the appointments.

The existing Liaisons were notified that Reynolds and Wolfe would meet the Liaison eligibility criteria after attending the 2018 JNC.

Dr. Gregory Reynolds
Lead Electronics Engineer (Navigation Technology)

Greg Reynolds is a lead electronics engineer in the navigation function at the Aviation and Missile, Research, Development, and Engineering Center (AMRDEC). He has over 15 years of service as a U.S. Army civilian with AMRDEC. Mr. Reynolds has established multiple Science & Technology (S&T) and Project office programs to harden the navigation solutions of multiple military systems. He has been the lead engineer in the development of a state of the art Positioning, Navigation, and Timing (PNT) testbed, which has been an integral part of developing, integrating, and testing emerging navigation technologies on the Gray Eagle and Shadow unmanned aerial vehicles. Mr. Reynolds also supports the Close Combat Weapons Systems (CCWS) and Precision Fires (PFFRMS) project offices, several navigation S&T efforts, and other programs through test and evaluation of navigation performance in GPS denied and degraded environments. In 2016 he was awarded the U.S. Army Modeling and Simulation award in the Test and Evaluation Individual Category for his work in developing the Gray Eagle Modeling, Navigation, and Integration (GEMNI) laboratory.

He holds a Bachelor of Science in Electrical Engineering from Missouri Science and Technology (S&T), a Master’s Degree in Electrical Engineering from the University of Alabama in Huntsville, and is expected to graduate with his Ph.D. in Electrical Engineering from the University of Alabama in Huntsville in May 2018.

Reynolds and his wife have been married for over 13 years and have three children.

Mr. David Wolfe
Product Line Division Chief

Mr. David Wolfe is the Product Line Division Chief at the United States Coast Guard Command, Control and Communications Engineering Center (C3CEN), Portsmouth, VA, responsible for the C4IT Service Center Product Lines assigned to C3CEN. He is responsible for the entire lifecycle development/sustainment engineering, configuration management & bi-level maintenance for all U.S. Coast Guard Command Centers, the Nationwide/Maritime Differential Global Positioning System (N/DGPS), Short Range Aids to Navigation (AtoN), the Nationwide Automatic Identification System (NAIS), Search and Rescue Communications Systems (Rescue 21/National Distress System) and the Coast Guard's Long range communications shore infrastructure.

Mr. Wolfe has been an active member & has served as Marine Representative in the Institute of Navigation. He has been heavily involved in the development of international navigation systems standards with the Radio Technical Commission for Maritime Services (RTCM), the International Electrotechnical Commission (IEC) & the International Association of Lighthouse Administrations (IALA). He has been involved with ION since 1998, regularly attending ION GNSS, ION NTM (1999-2006), and ION JNC periodically from 1998-2014 and regularly since. He was the ION Marine Representative from 2005-2007 and has been a session chair for GNSS or NTM about a dozen times over the years.
Prior to his 17 years at C3CEN, Mr. Wolfe was employed by the US Navy Military Sealift Command where he was the combat systems project manager for the Navy’s T-AGOS counter-drug squadron and with the Philadelphia Naval Shipyard where he was project manager for Radar Systems and Aircraft Landing Systems. Mr. Wolfe earned his BS in Electrical Engineering from Drexel University in 1990.

AGENDA

1. JNC Recap/Warfighter Recap
2. Status of JNC 2019, July 8-11, 2019, Long Beach, CA (Hyatt/Aerospace)
3. Government Liaison Status, Change Military Division Officers
4. Strategic Vision for Future Military Division Liaisons
5. Scheduling of Next Military Division Government Liaison Meeting

JNC Recap/Warfighter Recap

Kevin Coggins, Warfighter Panel Chair, reported on the warfighter panel. It was suggested that next year’s audience needed to be informed what information being presented was considered classified. It was suggested time allotted the panel could have been longer, especially if BG James participates again in 2019 as planned. It was agreed that holding the warfighter panel in the morning was preferable.

Other suggestions for the classified session included:

- 2SOPS panel participant be obtained.
- Pre-load questions to panel in advance that are oriented to a specific theme.
- Question cards given classification markings and sequence numbers in advance for Aerospace and someone ensure all cards are collected at the end of the session.
- Wolfe suggested a simple photo of the equipment each warfighter was referring to is displayed during the talk for familiarity/reference for the audience.
- Schedule: Lengthen break periods and shorten lunch period (ie: takes seven minutes to load/empty the room). Wash suggested one classified briefing be dropped from the schedule. It was also suggested start technical program at 8:00 a.m.
- Need to publish what time people need to be present in the security validation line to be considered “on time”.
- Speaker timing device needs to be sent to Aerospace in advance to be cleared through security. It was also suggested red, yellow and green flags be used.
- Spellerberg suggested she wanted to see more focused briefings from warfighter operational planning/S&T advisors’ perspective that focus on NAVWAR and PNT.
- It was agreed that the manner in which classified abstracts were reviewed this year (providing a channel through which additional classified materials could be sent through classified channels) greatly helped reduce demand on this session. It was recommended that this process be set up earlier in the year.
- There was discussion about whether or not to hold an “Acquisition Panel” at the classified level. The consensus of the committee was if this was hosted as part of the conference, that it be held at the FOUO level.
• Training and Test, Potentially Counter PNT, BlueForce Tracking session topics at the classified level were discussed.
• It was agreed that independent meetings at other classification levels could be added to the JNC by contractors/individual agencies without the JNC formally managing this process.

Greg Graham, JNC 2018 Program Chair, thanked group for an overall exceptional conference with special appreciation to Powell and Langer for the exceptional plenary on Tuesday. Compliments were extended for the handling of facilities this year in light of the 30% attendance growth and needing to be creative in seating people for plenary session overflow, dealing with classified session attendance and lunch service.

Comments/specific improvements for next year included:
• Add instructions to track chairs on how to start sessions. Ask track chairs to use the first five minutes of the session to read membership announcements and business announcements regarding cell phones, keeping conversations at FOUO level, etc. and any conference oriented announcements. Session Chairs should be left to manage presentations and introductions of authors.
• Remind track chairs to count number of people in each session.
• Ask track chair to help empty room prior to plenary so room can be combined.
• Add reminder to session chairs about managing FOUO materials, CD shredding and deleting presentations on the desktop from presentation computers.
• Work with hotel to formalize rate and process for conference parking discount at hotel.
• Ensure water (not just ice) is available at Aerospace.
• A proposal for how attendance/seating will be allocated in the classified session is needed.

Status of JNC 2019, July 8-11, 2019, Long Beach, CA (Hyatt/Aerospace)

It was announced that Eddy Emile would assume duties as Program Chair for JNC 2019 and Program Co-chair would be Joe Schnecker.

John Langer reported that the Military Division had approved a subsidy of $100 per person for JNC 2018 registration fees and he suggested that this cease in 2019. However, it was acknowledged that it was possible that the Division could continue to subsidize a portion of the fees for 2019 to help soften the increase.

Government Liaison Status, Change Military Division Officers

Elliott Kaplan, Military Division Chair, formally stepped down as Chair of the Division at the conclusion of the meeting and returned to status as a Liaison. John Raquet, ION president, appointed John Langer, as the incoming Military Division Chair effective at the conclusion of the meeting. It was reported that Langer would be confirmed by the ION Executive Committee
by an email vote the week following the meeting and begin functioning in this capacity effective immediately.

John Langer reported that he had appointed Sharon Donald as the incoming Vice Chair.

It was reported that Greg Graham and Bill Bollwerk were retiring; and Jalal Mapar had temporarily withdrawn.

Kaplan asked for Liaisons to actively solicit participation from DHS.

Strategic Vision for Future Military Division Liaisons

See Attached File: Military Div Liaisons-Strategic Vision 7-13-18

Scheduling of Next Military Division Government Liaison Meeting

ACTION: The Military Division would hold a face-to-face meeting in the DC area in early October to review the JNC 2019 session topics and discuss any proposed Military Division subsidy for JNC 2019 registration fees.

ACTION: A proposal for how attendance/seating will be allocated in the classified session is needed.

OTHER BUSINESS

Updated JNC Presentation Release Form

Beaty reported that the ION’s current publication release form did not aptly apply to JNC FOUO presentations. ION still needed a release form to give ION permission to handle material, to ensure ION was not in violation of another’s copyright in handling said materials, and to provide basic indemnity to the organization, but much of the copyright language could be eliminated.

However, because of the FOUO nature of the materials, Beaty asked if any of the committee members had a government attorney in their agency that would be willing to review a proposed draft of the release form to see if it would create any potential problems from the perspective of a government employee. Eddy Emile directed Beaty to send him her draft.

The meeting was adjourned at 11:30 a.m.
1. **The ION Executive Committee confirms John Langer as the ION’s Military Division Chair**

The motion in the email below was approved by the ION Executive Committee by email vote on July 20, 2018:

RE: CALL FOR VOTE: Confirm John Langer as ION’s Military Division Chair

At the conclusion of the ION JNC at the meeting of the Military Division on July 13, Elliott Kaplan stepped down as the ION’s Military Division chair and John Langer (formerly vice chair) assumed duties as the incoming Military Division chair. Dr. John Raquet, ION president, was present at the July 13 meeting and formally appointed John Langer as Military Division chair as outlined in the Military Division bylaws. Immediately following Langer’s appointment, Langer notified the Division that he had appointed Sharon Donald as the new Military Division vice chair.

Per the ION’s bylaws, the Military Division chair becomes a full voting member of the ION Executive Committee. Please sustain this action with the following motion:

**MOTION:** The Executive Committee sustains ION president John Raquet’s appointment of John Langer as the Military Division’s chair for a two-year term as outlined in the Military Division bylaws.

2. **Military Division Chair Approves Military Division Funds for AV Purchase**

On April 11, 2018, the Military Division Chair, Elliott Kaplan, in conjunction with vice chair John Langer, approved $10,600 of Military Division funds to purchase 12 wireless microphones. Reference memo below.

TO: Elliott Kaplan, Military Division Chair  
FROM: Lisa Beaty  
COPY: John Langer, Military Division Vice Chair and John Raquet, ION President  
DATE: April 11, 2018  
RE: Military Division Funding Request: Replace Microphones

**FUNDING REQUEST**

The ION National Office requests authorization to use no more than $10,600 of Military Division funds to purchase 12 wireless microphones (6 handhelds, 6 lapels).

**JUSTIFICATION**

**CURRENT WIRELESS MICS OPERATE IN AUCTIONED SPECTRUM**

Because of a recent FCC incentive auction, which was completed on April 13, 2017, a significant portion of spectrum in the 600 MHz band has been repurposed for use by wireless communications services. This spectrum will no longer be available for wireless microphone use.

The wireless microphones owned by ION operate within this portion of the 600 MHz spectrum. We will no longer be able to use our equipment once wireless services begin operation within this spectrum (as early as late 2018, but no later than 2020).
REBATE FOR EXCHANGE OF CURRENT MICS THROUGH AUGUST 2018
Shure, Inc., the manufacturer of our microphones, is currently offering a rebate to exchange 600 MHz microphones for new equipment that operates outside the auctioned spectrum. The rebate is valid through August 2018.

BENEFITS OF NEW MICROPHONES
The new generation of digital microphones is compliant with currently foreseeable spectrum allocations. Additionally, for JNC events, the new equipment features an encrypted signal, which will prevent reception of FOUO presentation audio by unauthorized parties.

COST TO REPLACE
ION owns 10 wireless microphones (5 handheld, 5 lapel). The estimated cost to replace these microphones is detailed below.

- Price per microphone: $1,037.50
- Purchase price: $12,450.00
- Rebate, if purchased prior to August 2018: ($2,500.00)
- Cost to ION with rebate: $9,950.00 (prior to tax and shipping)

For comparison, renting one wireless microphone from a hotel or convention center costs approximately $200/day before taxes, 25% labor and service fees. ION breaks even in purchasing the microphone after one event.

JUSTIFICATION FOR MILITARY DIVISION TO FUND
1) The cost to the Division to buy the equipment will be the same as renting it in Long Beach. No net difference to the Division.
2) The Satellite Division has been exclusively funding AV equipment purchases, which the Military Division has benefited from for the past six years. The Military Division will continue to benefit from use of the laptops, screens, LCD’s etc. all purchased by either the ION National or the Satellite Division.
3) This is one portion of required equipment for JNC the Military Division can support that also meets the unique benefit of JNC encryption.