



Navigation Systems Panel Report Semi-Annual Report

Zak Kassas

Chair, Navigation Systems Panel

AESS Board of Governors Meeting – Spring 2026

15-16 May 2026

Phoenix, AZ, USA

The Panel shall address navigation systems for aircraft, spacecraft, ground and marine vehicles and pedestrians as well as history of navigation systems and navigation education.

Objectives

The objectives of this Panel are:

1. Work with the Institute of Navigation (ION) and the PLANS Executive Committee to select and support volunteers for PLANS (e.g., track chairs, session chairs, etc.).
2. Maintain a repository of past conference Budgets, Final Reports, Best Practices and lessons learned.
3. Promote the submission of navigation manuscripts to the IEEE Transactions on Aerospace and Electronic Systems and the AESS Magazine.
4. Facilitate NSP nominations/endorsements for Senior Member and Fellow Grade.
5. Develop, as needed, new conferences related to the NSP's areas of interest.

About the Navigation Systems Panel (NSP)

Position	First Name	Affiliation	Affiliation Type	Region
Chair	Zak Kassas	Ohio State University	Academia	2 (Eastern U.S.)
Vice Chair	Fabio Dervis	Politecnico di Torino	Academia	8 (Africa, Europe, Middle East)
Member	Jason Gross	West Virginia University	Academia	2 (Eastern U.S.)
Member	Pau Closas	Northeastern University	Academia	1 (Northeastern U.S.)
Member	Gary McGraw	PNT Consultant – Collins Aerospace	Industry	4 (Central U.S.)
Member	Randall Curey	Northrop Grumman	Industry	6 (Western U.S.)
Member	Mohammad Tehrani	Innova Photonics	Industry	6 (Western U.S.)
Member	Elena Lohan	Tampere University	Academia	8 (Africa, Europe, Middle East)
Member	Thomas Pany	Universität der Bundeswehr München	Academia/Government	8 (Africa, Europe, Middle East)
Member	Jindřich Dunik	University of West Bohemia/Honeywell	Academia/Industry	8 (Africa, Europe, Middle East)
Member	Omar Crespillo	Isar Aerospace	Industry	8 (Africa, Europe, Middle East)
Member	Andrew Depmster	University of New South Wales	Academia	10 (Asia and Pacific)
Member	Micahel Meurer	DLR	Government	8 (Africa, Europe, Middle East)
Member	Ali Abdallah	Google	Industry	6 (Western U.S.)

Panel Meetings

- Virtual meetings in March 2026, May 2026
- Informal meetings in January 2026 at ION ITM Conference, California, USA, and March 2026 at Munich Space Summit, Germany

Distinguished Lectures (DL)

- Panel Chair Zak Kassas delivered several in-person DLs on topics related to the panel's scope (navigation systems): American University of Beirut, Lebanese American University, Embry-Riddle Aeronautical University (Florida, USA), Center for Automotive Research (Ohio, USA), German Aerospace Center (Oberpfaffenhofen, Germany)

Membership

Membership in the Panel slightly changed, with one member leaving the Panel due to inactivity and two new members joining. The Panel is considering the solicitation of additional members to promote diversity among professional affiliation (specifically industry and government) and geographic diversity (specifically Asia, South America, Africa)

Publications

- The Panel discussed with the AESM EiC to publish an extension of selected papers from inaugural IEEE Navigation Conference (NAVICON)

AESS Awards

- The NSP Chair was heavily engaged with AESS VP of Awards in formalizing rigorous selection criteria of the IEEE AESS Kershner Award- the highest award by AESS that recognize an individual who has made a substantial contribution to the technology of navigation and position equipment, systems, or practices. This award is to be given at the inaugural IEEE Navigation Conference 2026.
- The NSP Chair was heavily engaged with AESS VP of Awards in formalizing a rigorous selection criteria for the IEEE AESS Walter Fried Award. This award is to be given at the inaugural IEEE Navigation Conference 2026

Conference Activities

- The NSP was engaged in the planning of IEEE/ION PLANS 2027
 - The Program Chair was chosen as Fabio Dovis, NSP Vice Chair
 - The Tutorial Chair was chosen as Pau Closas, NSP member
 - One of the four Track Chairs is an NSP member: Ali Abdallah

Conference Activities

- The NSP was heavily involved in organizing the inaugural IEEE Navigation Conference (NAVICON) 2026, a new IEEE AESS flagship conference, to take place in Munich, Germany, Dec. 9-11, 2026
- The core organizing committee:
 - 2 General Co-chairs are NSP members and the 2 Program Co-chairs are the NSP Chair and Co-chair
 - Many NSP members are involved in various organizational roles
 - Members from the Avionics Systems Panel are also involved in organizational roles
- Major activities to-date
 - Launching the website: <https://ieee-nav.org/2026>
 - Call for papers (submission due date: June 15)
 - Call for special session (submission due date was April, 11 special session proposals received)
 - Call for tutorials (submission due date: May 15)
 - TPC formalized and invitations sent out
 - EDAS submission portal set up
 - Program is being formalized: tutorials, plenaries, special sessions, parallel tracks, poster sessions
 - Social events are being formalized: receptions, awards ceremony, dinner

Conference Activities

- Continue supporting the organization of IEEE/ION PLANS 2027
- Finalize the formalization of the IEEE AESS Kershner Award and IEEE Walter Fried Award
- Continue organizing IEEE NAVICON 2026
- Support the AESS Inter-Panel PhD School 2026