

Report to the AESS Board of Governors on the Institute of Navigation (ION)

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Introduction

The Institute of Navigation was founded in 1945 and has evolved into the world's premiere non-profit professional society focused on the advancement of Positioning, Navigation and Timing (PNT) technologies and applications. It is affiliated with the International Association of Institutes of Navigation. The other navigation institutes are apparently not as active as the ION except possibly for the German Institute of Navigation that sponsors the European Global Navigation Systems Conference.

The scope of the ION activities includes Technical Conferences, Educational Programs, a Technical Journal and Newsletter, ION Sections across the USA and Canada, an Awards Program and a Congressional Fellows Program. There is also division that is devoted to Satellite Navigation Systems.

Sponsored Technical Conferences

The ION cosponsors the PLANS with the AESS and the Joint Navigation Conference (JNC) with the Joint Services Data Exchange (JSDE) that involves the US Army, Air Force and Navy and includes classified sessions. The ION solely sponsors the annual International Technical Meeting (ITM) in the winter usually in San Diego and the Global Navigation Satellite Systems (GNSS) Conference which is a very large meeting with thousands of attendees and a large number of exhibits. The next GNSS Conference will take place in Portland, Oregon in September. The ION also cosponsors occasional meetings such as the International Symposium on Mobile Mapping in Cracow, Poland in June this year and the Technical Forum on Satellite Navigation and Positioning in Shanghai in August this year. There is also the annual GNC Autonomous Weapons Workshop being sponsored this year in October in Fort Walton Beach.

In the past the ION solely sponsored their Annual Meeting in the spring but since joining the AESS in cosponsoring the PLANS and with ION involvement in other meetings, this meeting has been discontinued.

Educational Programs

The ION has a few Online Tutorials available at their website. One tutorial is free whereas the others charge members \$50 and non-member \$100. Incidentally, ION membership fees range from \$75 to \$180 depending on article access privileges and your home mailing address. The ION currently conducts autonomous vehicle competitions for high school and college students involving snowplows, lawnmowers and automobiles. The ION also encourages member involvement in outreach programs on navigation subjects down to the middle school level.

Awards

The ION has seven major awards for contributions to navigation technology in different categories. These are the Thurlow award, the highest award that is endowed by Sherman Fairchild, the Kepler award for contributions to satellite navigation technology and the Hays, Weems, Burka and the Superior and Early Achievement awards.

Corporate Membership

The ION has been very successful in obtaining corporate membership primarily through member activity in the Inertial Navigation System and Satellite Navigation System fields of technology including testing means for such products. In all the ION currently has 119 Corporate Members.

Congressional Fellowship

This activity is similar to the IEEE Congressional Fellowship program where a member is selected from a group of applicants to participate in advising congressional staffers and government agencies on issues related to their expertise which in the case of the ION focuses on navigation technology.

Publications

The ION publishes a quarterly peer reviewed journal called "Navigation" and a significantly newsworthy quarterly "Newsletter" on various navigation-related events occurring around the world and within the ION. Of particular note is the always interesting article on a historical navigation-related subject.

There is considerable commonality of editors between the ION Journal and the AESS Transactions. Membership in the AESS and the ION is also not uncommon.