



IEEE Aerospace Electronic Systems VP for Awards

Dale Blair

AESS Board of Governors Meeting – Fall 2025

10 and 11 October 2025

Krakow, Poland

- IEEE BoD and TAB approved transfer of \$75k to the IEEE Foundation to make the Warren White Award self-sustaining
 - Waiting on approval of transfer given that transfers to IEEE Foundation are limited each year.
 - May not be allowed to make full \$75k transfer in 2025
- Appointed committees for 2026 Awards
 - Done: Pioneer Award, Nathanson Award, White Award, Industrial Innovation Award, AESS Early Career Award
 - In Progress: Judith Resnik, Engineering Scholarship Robert Hill Award, M. Carlton Award, Mimno Award
 - Eliminate the AESS Chapter of the Year Award?
- Uncertain future for Walter Fried and Kerschner Awards
- IEEE AESS Challenge Problem II: Cybersecurity
 - RFP written for problem and distributed
 - Nine proposals (three really good) for problem submitted
 - Selected winner and IEEE documents for sending the funds are completed.
- IEEE AESS Challenge Problem I: Radar (Heart Rate Monitoring in Dynamic Environments)
 - RFP written for solutions and distributed
 - 12 proposals submitted and most all missed the mark.
 - Extended deadline for revised proposals
- Senior Design Project Program
 - Proposal from Tennessee Tech Electrical and Computer Engineering Department for Triage Drone Follow On
 - Plan proposed

- Walter Fried Award for Best Paper at the ION PLANS Conference
 - PLANS is no longer affiliated with IEEE
 - Walter Fried Award is funded by the IEEE Foundation
 - Recommend negotiation with ION for IEEE AESS to manage the award and appoint the committee
- Kerschner Award recognizes individuals who have made a substantial contribution to the technology of navigation and position equipment. systems, or practices.
 - No record of IEEE Award
 - Typically given at ION PLANS conference
 - Recommend negotiation with ION for initiating Kerschner Award as an IEEE Award or ION Award

- IEEE AESS Challenge Problem II: Cybersecurity
 - RFP written for problem and distributed
 - Nine proposals (three really good) for problem submitted
 - Selected winner and IEEE documents for sending the funds are completed.
 - Learned that we need to improve our communications in the RFP.
 - Announcement was posted on AESS web site in part without full RFP.
 - Scope of the problem and its definition and delivery
- IEEE AESS Challenge Problem I: Radar (Heart Rate Monitoring in Dynamic Environments)
 - RFP written for solutions and distributed
 - 12 proposals submitted and most all missed the mark.
 - Extended deadline for revised proposals
 - Need to improve our communications on specifics of the challenge problem
 - Announcement was posted on AESS web site in part without full RFP.
 - Paper from ASU was not clear that the problem included processing datasets that will be provided
 - RFP needs to be clear what is to be solved with some details.
- Anticipated Benefits of Challenge Problems
 - Enhance the formulation of the problem under study
 - Validate good approaches
 - Aid in the formulation of system-level metrics

- Senior Design Project Program
 - Fund (\$1000 –to \$4000) design projects for a team of senior (fourth year undergraduate) students for which students get some academic credit.
 - In USA, all undergraduate students must complete a two semester senior capstone design project.
 - In rest of world, funding senior design projects is less clear.
 - Pros
 - Contact of undergraduate students with IEEE
 - Impact of IEEE AESS on educational experience of undergraduate students
 - Gives IEEE AESS insight into the education of undergraduate students
 - Encourage IEEE AESS members to get involvement in engineering education
 - Cons
 - Cost of IEEE AESS could be \$25k per year.
 - Head ache for IEEE AESS VP Awards
 - Proposal from Tennessee Tech Electrical and Computer Engineering Department for Triage Drone Follow on
 - Plan proposed

- Issue RFPs in October and March of each year
 - Send to IEEE AESS Student Chapters
 - Send to IEEE AESS Chapters to encourage engagement as sponsors
 - Send to IEEE AESS Membership to encourage encouragement as sponsors
 - Distribute at IEEE AESS Conferences
 - Proposals due prior January 15 and September 1
- Fund proposals (\$1000-\$4000) as approved on a first come, first serve basis
- Appoint a committee to approve proposals.
- Allocate \$25k per year for funding proposals

Complete appointment of all award committees prior to November 1, 2025

Start an update to IEEE documentation of AESS Awards

Develop an Operational Manual for AESS Awards

- Revise/update IEEE documentation of AESS Awards to reflect recent changes
- Formalize the appointment dates and process for award committees
- Formalize the selection process

Strength

- Formalize, transparent, and consistent execution of award process

Weaknesses

- Less flexible. May require VP intervention to allow exceptions

Opportunities

- Prestigious Awards Program

Threats

- Lack of time from volunteers and Julia

Nathanson Award

- Objective from TABAC
- Appointment of Selection Committee

VP for Awards in conjunction with Radar Systems Panel (RSP) Awards Chair appoints five members and a chair for the selection committee. Members serve three consecutive years on the committee with original appointment from members of the RSP. Chair serves three consecutive years and RSP membership is not required for the chair.
- Operation of the Committee
 - Chair schedules and leads all meetings. Chair rejects any nonqualifying nominations with concurrence from the committee. Chair provides all nominations to the committee with a score sheet. Committee members provide initial scores and Chair schedules a meeting to discuss scores. Committee delivers final scores and committee selects the winner. If a conflict arises, Chair scores nominees to resolve conflict. Chair provides winner and final score sheet to VP for Awards.

Nathanson Award

- Notifications

VP for Awards notifies all nominees and IEEE AESS Administrative Assistant of the decision of the committee.

- Delivery of Award

IEEE AESS Administrative Assistant orders plaque from xyz. IEEE AESS Administrative Assistant completes paperwork for payment of honorarium, coordinates for scholarship through IEEE foundation, and coordinates for presentation and payment of travel expenses. VP for Awards or surrogate presents award at AESS conference.

- Schedule

Event	Date
Appointment of Committee	October 1
Open for Nominations with Announcement in AESS Newsletter	October 1
Nominations Due	January 15
Selection of Winner	February 15

- Fund the Triage Drone Follow On Proposal from Tennessee Tech ECE Department for Senior Capstone Design Project
- Pros:
 - Engagement of Undergraduate Engineering Students (Team and Department (about 250 students))
 - Follow on project in area of interests to AESS: Radar, drones, microphone, and video
 - Learning to implement a formal Senior Design Program
- Cons:
 - AESS funds
- Financial Implications: Reduce the AESS budget by \$4000 for a drone and sensors with university match of \$1100.

- Initiate Senior Design Project Program funded at a limit of \$25k per year.
- Pros:
 - Engagement of Undergraduate Engineering Students (Team and Department)
 - Engagement of IEEE AEES members in undergraduate engineering education
- Cons:
 - AEES funds required
- Financial Implications: As much as \$25k per year

- Eliminate the AESS Chapter Award
- Pros:
 - Reduce AESS expenditures on award that has little interest
 - Reduce the time volunteer on an award that has little interest
 - Increase expenditures on chapter events/activities
- Cons:
 - Less encouragement for conference support
 - Less encouragement for chapter meetings
- Financial Implications: Reduce the AESS budget by \$2000 per and travel expenses of chapter member to receive award.

- Create Kerschner Award for individuals who have made a substantial contribution to the technology of navigation and position equipment, systems, or practices.
- Pros:
 - Engagement of a large segment of IEEE AESS membership
 - Growth of IEEE AESS membership
- Cons:
 - Conflict relationship between IEEE AESS and ION
- Financial Implications: \$2000 for honorarium and \$1000 for plaque.