

Editors

Editor-in-Chief–Daniel W. O'Hagan,
Fraunhofer FHR, Germany
VP Publications–Lance Kaplan, U.S. Army
Research Laboratory, USA
AESS President–Mark Davis, Independent
Consultant, USA
Operations Manager, AESS–Amanda Osborn,
LLC, USA

Contributing Editors

Awards–Fulvio Gini, University of Pisa, Italy
Book Reviews Editor–Samuel Shapero, Georgia
Tech Research Institute, USA
Conferences–Braham Himed, Air Force Research
Laboratory, USA
Distinguished Lecturers & Tutorials–Alexander
Charlish, Fraunhofer Institute for
Communication, Information Processing
and Ergonomics, Germany
Education–Alexander Charlish, Fraunhofer
Institute for Communication, Information
Processing and Ergonomics, Germany
History–Hugh Griffiths, University College
London, UK
Student Research–Federico Lombardi,
University College London, UK
Technical Panels–Michael Braasch,
Ohio University, USA
Tutorials–W. Dale Blair, Georgia Tech Research
Institute, USA
Website Updates–Amanda Osborn, Conference
Catalysts, LLC, USA

Associate Editors and Areas of Specialty

Scott Bawden–Energy Conversion Systems,
Arctic Submarine Laboratory, USA
Erik Blasch, US Air Force Research Lab (AFRL),
USA
Roberto Sabatini, RMIT University, Australia–
Avionics Systems
Stefan Brueggenwirth, Fraunhofer Institute for
High Frequency Physics and Radar
Techniques FHR, Germany–AI and ML in
Aerospace
Dietrich Fraenken, Hensoldt Sensors, Germany–
Fusion and Signal Processing
Lyudmila Mihaylova, The University of
Sheffield, UK–Target Tracking
Mauro De Sanctis, University of Rome "Tor
Vergata," Italy–Signal Processing and
Communications
Jason Gross, West Virginia University (WVU),
USA–Navigation, Positioning
Giancarmine Fasano, University of Naples
Federico II, Italy–Unmanned Aircraft Systems
Daniel O'Hagan, Fraunhofer Institute for High
Frequency Physics and Radar Techniques
FHR, Germany–Radar Systems
Raktim Bhattacharya, Texas A&M,
USA–Space Systems
Haiying Liu, DRS Technologies, Inc., USA–
Control and Robotic Systems
Michael Cardinale, Retired, USA–Electro-Optic
and Infrared Systems, Image Processing
Ruhai Wang, Lamar University, USA–Systems
Engineering
Marco Frasca, MBDA, Italy–Quantum
Technologies in Aerospace Systems

How to Reach Us

We welcome letters to the editor; but, we
reserve the right to edit for space, style, and
clarity. Include address and daytime phone
number with your correspondence.

E-mail: Daniel W. O'Hagan,
danieloha@gmail.com
Catherine Van Sciver,
c.vansciver@ieee.org



August 2022

ISSN 0885-8985

Volume 37 Number 8

COLUMNS

In This Issue –Technically 3

FEATURE ARTICLES

**Maximization of LEO Nanosatellite's Transmission Capacity to
Multiple Ground Stations: Orbit Selection and Requirements on
Attitude Control**
A.A. Avram, C. Bettanini, S. Chiodini, A. Aboudan, G. Colombatti, M. Giuliani 4

**Cooperative Control of UAVs Over an Unreliable Communication
Network**
M. Schwung, J. Lunze 20

**Integrating Multiband Active and Passive Radar for Enhanced Situational
Awareness**
D. Fränken, T. Ott, S. Lutz, F. Hoffmann, P. Samczyński, M. Płotka,
M. Dróżka, C. Schüpbach, Z. Mathews, S. Welschen, I. Norheim-Næss 36

NEWS AND INFORMATION

IEEE Aerospace & Electronic Systems Society Organization 2022 2

Aerospace & Electronic Systems Society Distinguished Lecturers 35

Interview: Interview With Professor Yaakov Bar-Shalom
P. Willett 51

AESS Senior Members Elevated in 2022 56

Obituary: Merrill I. Skolnik's 50 Year Impact on Radar Development
M.E. Davis 57

AESS Meetings and Conferences inside back cover

Publishers: Send books for review to Samuel Shapero, 407 Angier Place NE, Atlanta, GA 30308. If you have questions, contact Samuel by e-mail at samuel.shapero@gtri.gatech.edu.

Advertisers

If you are interested in advertising in the AESS SYSTEMS Magazine, please contact Anthony Land at Naylor Associates at aland@naylor.com or Daniel W. O'Hagen at danieloha@gmail.com