

Editors

Editor-in-Chief—*Peter K. Willett*
Associate Editor-in-Chief—*David F. Crouse*
VP Publications—*Maria S. Greco*
AESS President—*Joe Fabrizio*
Executive Assistant, AESS—*Jane Buckingham*

Contributing Editors

Awards—*Erwin C. Gangl*
Book Reviews Editor—*Darin Dunham*
Conferences—*Mark Davis*
Distinguished Lecturers & Tutorials—*Kathleen Kramer*
Education—*Kathleen Kramer*
History—*Hugh D. Griffiths*
Student Research—*Wenbo Dou, Federico Lombardi*
Technical Panels—*Walter Downing*
Tutorials Editor—*W. Dale Blair*
Website Updates—*Judy Scharmann*

Associate Editors and Areas of Specialty

Scott Bawden—*Energy Conversion Systems*
Erik Blasch, Roberto Sabatini—*Avionics Systems*
Dietrich Franken—*Communications, Signal Processing, and Data Fusion*
David Crouse—*Target Tracking*
Mauro De Sanctis—*Signal Processing and Communication in Aerospace Systems*
Michael Braasch—*Navigation, Positioning*
Giancarmine Fasano—*UAS*
Daniel O'Hagan—*Radar Systems*
Open—*Astronautic and Aeronautic Systems*
Haiying Liu—*Control System Engineering and Robotic Systems*
Michael Cardinale—*Electro-Optic and Infrared Systems, Image Processing*
Ruhai Wang—*Systems Engineering*
Peter Willett—*Multi-Sensor Systems*

How to Reach Us

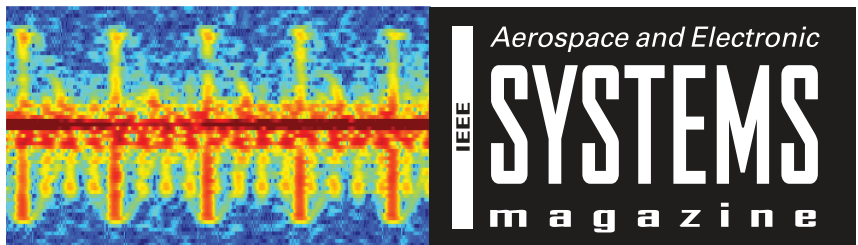
We welcome letters to the editor; but, we reserve the right to edit for space, style, and clarity. Include address and daytime phone number with your correspondence.

Email: Peter Willett,
peter.k.willett@gmail.com
David Crouse,
david.crouse@nrl.navy.mil
Michael J. Hellrigel,
m.hellrigel@ieee.org

Publishers: Send books for review to Darin Dunham, Lockheed Martin, 208 Buddy Tate Ln, Meridianville, AL 35759. If you have questions, contact Darin by e-mail at darin.t.dunham@lmco.com.

Advertisers

If you are interested in advertising in the AESS SYSTEMS Magazine, please contact Peter Willett at peter.k.willett@gmail.com



November 2019

ISSN 0885-8985

Volume 34 Number 11

COLUMN

In This Issue – Technically 2

FEATURE ARTICLES

A Miniaturized VHF-Band Wilkinson Power Combiner for High-Power Application
J. Tayebpour, B. Ahmadi, M. Fallahzadeh 4

Deep-Space Optical Communication Link Engineering: Sensitivity Analysis
N. K. Lyras, A. D. Panagopoulos, P.-D. Arapoglou 8

Additively Manufactured Luneburg Retroreflector
J. C. Deroba, K. D. Sobczak, A. Good, Z. Larimore, M. Mirotznik 20

RF Sensing Technologies for Assisted Daily Living in Healthcare: A Comprehensive Review
S. A. Shah 26

Deep Learning for Classification of Mini-UAVs Using Micro-Doppler Spectrograms in Cognitive Radar
A. Huizing, M. Heiligers, B. Dekker, J. de Wit, L. Cifola, R. Harmanny 46

Safety Assessment Process Optimization for Integrated Modular Avionics
Y. Wang, H. Lei, R. Hackett, M. Beeby 58

NEWS AND INFORMATION

2019 Aerospace & Electronics Systems Society Distinguished Lecturers ... 7

AESS Senior Members Elevated in 2019 25

IEEE Aerospace & Electronic Systems Society Organization 2019 57

Report on the 6th IEEE AESS Workshop on Metrology for AeroSpace ... 68

Conference Report: International Radar Symposium 2019 72

IEEE Aerospace & Electronic Systems Society Organization 2019 74

AESS Meetings & Conferences inside back cover