



IEEE  
AEROSPACE  
and  
ELECTRONIC

# SYSTEMS

January 2008  
ISSN 0885-8985  
Volume Twenty Three  
Number One

**Editor-in-Chief** – Evelyn H. Hirt  
**Assistant Editor** – Marina Ruggieri  
**Editorials Editor** – Lance M. Kaplan  
**Administrative Editor** – David B. Dobson  
**Assistant Administrative Editor** – A. Lim

**Sector Editors**

General & Comcl. Aviation – George Dean  
Avionics –  
Modeling & Simulation –  
Position, Location & Navigation –  
Radar Systems – Hugh Griffiths  
Sensors & Instrumentation –  
Space Systems –  
Systems Engineering –  
Book Reviewers –  
News & Information – A. Lim

**Contributing Editors**

Awards – Erwin C. Gangl  
Conferences – Barry C. Breen  
Education – Steve E. Watkins  
Ethics –  
History – Henry Oman, Ron Schroer  
Patents, Stds. & Reg. Issues –  
Arnold M. Greenspan  
Technical Panels – James R. Huddle

**How to Reach Us**

We welcome letters; we reserve the right to edit for space, style, and clarity. Include address and daytime phone number.  
**E-mail:** Systems.AESS@ieee.org  
**Fax:** 301/657-0209  
**Mail:** IEEE A&E Systems Magazine,  
4500 N. Park Avenue, Chevy Chase,  
MD 20815-7239, USA

**Address Changes & General Information**

There is one method for updating your IEEE records: address, phone/fax numbers, e-mail address, etc.). Make on-line changes at:  
<http://service@ieee.org/memberserv/cao/intro.htm>  
**IEEE Website:** [www.ieee.org](http://www.ieee.org)  
**AESS Website:** <http://www.ieee.aess.org/default.php>

**Magazine Deadlines:** Material (except articles) must be received by no later than 60 days prior to the month of the issue in which it is to appear.

**Contributions within the scope of the Society are solicited.** Use the web-based submission system at: <http://sysaess.msubmit.net>. Guidelines may be found on the banner at the top of the submission homepage under "Information to Author." We do not encourage special sections but will consider special series. Contact the Editor-in-Chief.

*In This Issue – Technically* . . . . . 2

## Articles

◆ **European Airport Movement Management: The Italian Challenge** . . . . . 3

*M. Ruggieri, D. Teotino & A. Nuzzo*

◆ **Diamond Milling of Micro-Optics** . . . . . 13

*W.C. Sweatt, D.D. Gill, D.P. Adams, M.J. Vasile & A.A. Claudet*

◆ **Moving Object Detecting Method in Video** . . . . . 18

*O. Yang*

◆ **Magnetic Signal Processing & Analysis for Airfield Traffic Surveillance** . . . . . 21

*K. Dimitropoulos, et al.*

◆ **Component-Based Performance-Sensitive Real-Time Embedded Software** . . . . . 28

*L. Wang*

## Conference Reports

◆ **International Radar Symposium, Cologne, Germany** . . . . . 35

*H. Rohling*

◆ **5<sup>th</sup> International Energy Conversion Engineering Conference** . . . . . 37

*H. Oman*

## Column

◆ **Greetings! . . . Happy 2008! – E.H. Hirt** . . . . . 41

## News & Information

**AESS Chapters: New Jersey Coast & Ottaawa** . . . . . 42  
**Lectures in Atlantic Canada** . . . . . 43  
**Leonard elected Fellow of the Royal Aeronautical Society** . . . . . 46  
**INCOSE Symposium** . . . . . 47  
**Membership Information** . . . . . 48  
**Conferences & Meetings Calendar** . . . . . Inside Back Cover