

PREVIOUS WINNERS OF THE WILLIAM E. JACKSON AWARD

2023 – Dr. Elisa Galon, Illinois Institute of Technology, *High-Integrity Modeling of Non-Stationary Kalman Filter Input Error Processes and Application to Aircraft Navigation*

2022 – Dr. Timothy Needham, Ohio University, *Gravity Modeling in High-Integrity GNSS-Aided Inertial Navigation Systems*

2021 – Andrew Videmsek, Russ College of Engineering and Technology of Ohio University, Aircraft Based GPS Augmentation Using an On-Board RADAR Altimeter for Precision Approach and Landing of Unmanned Aircraft Systems

2020 – Dr. Rachael E. Tompa, Stanford University, *Optimal Aircraft Rerouting during Space Launches*

2019 – Dr. Tyler Reid, Stanford University, Orbital Diversity for Global Navigation Satellite Systems

2018 - Pengfei (Phil) Duan, Ohio University, Predictive Alerting for Improved Aircraft State Awareness

2017 – Adam Naab-Levy, Ohio University, Enhanced Distance Measuring Equipment Data Broadcast Design, Analysis, Implementation, and Flight-Test Validation

2016 – Dr. Nicholas Hanlon, University of Cincinnati, *Simulation Research Framework with Embedded Intelligent Algorithms for Analysis of Multi-Target, Multi-Sensor, High-Cluttered Environments*

2015 – Dr. Ing Kenneth Chircop, University of Malta, *On trajectory optimisation for the reduction of fuel burn and emissions*

2014 - Dr. Kuangmin Li, Ohio University, Enhanced Distance Measuring Equipment Carrier Phase

2013 – Dr. Fabrice Kunzi, Massachusetts Institute of Technology, *Development of a High-Precision ADS-*B Based Conflict Alerting System for Operations in the Airport Environment

2012 – NO AWARD GIVEN

2011 – Dr. Andrew Sammut, University of Malta, A Runway Collision Avoidance and Alerting System

2010 – Dr. Maxime Gariel, Georgia Institute of Technology, *Towards a Graceful Degradation of Air Traffic Management Systems*

2009 – Dr. Grace Xingxin Gao, Stanford University, *Towards Navigation Based on 120 Satellites Analyzing the New Signals*

2008 – Dr. Yan Wan, Washington State University, A Scalable Methodology for Evaluating and Designing Coordinated Air Traffic Flow Management Strategies Under Undercertainty

2007 – Dr. Sanjeev Gunawardena, Ohio University, *Development of a Transform- Domain Instrumentation Global Positioning System Receiver for Signal Quality and Anomalous Event Monitoring*



2006 – Dr. Jacob L. Campbell, Ohio University, Application of Airborne Laser Scanner to Aerial Navigation

2005 – Dr. Alexander M. Mitelman, Stanford University, *Signal Quality Monitoring For GPS Augmentation Systems*

2004 – Dr. Chad W. Jennings, Stanford University, *Threat Displays for Final Approach*

2003 – Dr. Tom G. Reynolds, Massachusetts Institute of Technology, *Investigating Conformance Monitoring Issues in Air Traffic Control Using Fault Detection Approaches*

2002 – Dr. Andrey A. Soloviev, Ohio University, Investigation into Performance Enhancement of Integrated Global Positioning/Inertial Navigation Systems by Frequency Domain Implementation of Inertial Computational Procedures

2001 – Dr. Robert E. Phelts, Stanford University, *Multi-correlator Techniques for Robust Mitigation of Threats to GPS Signal Quality*

2000 - Dr. Robert A. Gray, Ohio University, Inflight Detection of Errors for Enhanced Aircraft Flight Safety and Vertical Accuracy Improvement Using Digital Terrain Elevation Data with an Inertial Navigation System, Global Positioning System and Radar Altimeter

1999 - Dr. Amy R. Pritchett, Massachusetts Institute of Technology, *Pilot Non- Conformance to Alerting System Commands During Closely Spaced Parallel Approaches*

1998 - Dr. Chris G. Bartone, Ohio University, *Ranging Airport Pseudolite for Local Area Augmentation* Using the Global Positioning System

1997 - Dr. Dennis Akos, Ohio University, A Software Radio Approach to Global Navigation Satellite System Receiver Design

1996 - Dr. Boris S. Pervan, Stanford University, *Navigation Integrity for Aircraft Precision Landing Using the Global Positioning System*

1995 - James K. Kuchar, Massachusetts Institute of Technology, *A Unified Methodology for the Evaluation of Hazard Alerting Systems*

1994 - Dr. David Diggle, Ohio University, *Satellite-Based Positioning Systems for Flight Reference and Aircraft Autoland Operations*

1993 - Dr. Clark E. Cohen, Stanford University, Attitude Determination Using GPS

1992 - Michael S. Braasch, Ohio University, On the Characterization of Multipath Errors in Satellite-Based Precision Approach and Landing Systems

1991 - Zhihang Chi, Massachusetts Institute of Technology, *An Adaptive Final Approach Spacing Advisory System: Modeling, Analysis and Simulation*



- Brenda L. Belkin, Princeton University, *Cooperative Rule-Based Systems for Aircraft Navigation and Control*

 - Frank van Graas, Ohio University, *Hybrid GPS/Loran-C: A Next Generation of Sole Means Air Navigation*

- Sally A. Mathias, Ohio University, *Development of Siting Criteria for the Collocation of the Microwave Landing System (MLS) and the Approach Lighting System (ALS)*

- Sanjaya Sharma, Ohio University, Error Sources Affecting Differential or Ground Monitored Operation of the Navstar Global Positioning System

- Norry Dogan, Massachusetts Institute of Technology, *Final Approach Guidance Using an Altimeter-Aided Loran-C Display System*

- John K. Einhorn, Massachusetts Institute of Technology, *Probabilistic Modeling of Loran-C for Nonprecision Approaches*

- Jon S. Tatro, New Mexico State University, A Horizontal Display for Vertical and Translational Navigation Flight Control

 - Fujiko Oguri, Ohio University, Area Navigation Implementation for a Microcomputer-Based Loran-C Receiver

- Joseph P. Fischer, Ohio University, A Microcomputer-Based Position Updating System for General Aviation Utilizing Loran-C

 - Kent A. Chamberlin, Ohio University, Investigation and Development of VHF Ground-Air Propagation Computer Modeling including the Attenuating Effects of Forested Areas for Within-Line-of-Sight-Propagation Paths

 - Dr. Dennis B. Beringer, University of Illinois, *Design and Evaluation of Complex Systems:* Applications to a Man-Machine Interface for Aerial Navigation

- Paul Barton, University College, London, *Airborne Signal Processing for the Microwave Doppler Landing Systems*

 - James R. Becker, Jr., Dartmouth College, Thayer School of Engineering, *The Design of Airborne Navigation Equipment for General Aviation*

 - Chen-Chung Hsin, Massachusetts Institute of Technology, Flight Transportation Laboratory, An Analytical Study of Advanced Terminal Area Air Traffic Management and Control

- Yuk-Bun Cheng, West Virginia University, Analysis of Aircraft Antenna Radiation for Microwave Landing Systems Using Geometrical Theory of Diffraction

- Peter V. Hwoschinsky, Massachusetts Institute of Technology, *Flight Test and Evaluation of Omega Navigation for General Aviation Aircraft*