



## Barchi Prize Nominations

2012 Nominees selected as the best paper in their working group,  
composite group or other session at the 79th MORSS

| WG/<br>Session | Title and Authors  |
|----------------|--|
| 1              | <i>No Nomination</i>   |
| 2              | <b><i>Dispersion for Critical Infrastructure Using Computational Fluid Dynamics</i></b><br>Eric Mortin - AMSAA   |
| 3              | <i>No Nomination</i>   |
| 4              | <b><i>Energy Security and Other Considerations for Planning and Programs</i></b><br>Capt Paul Griffith – USAF, Operations Research and Resource Analysis |
| 5              | <b><i>US Coast Guard Fleet Mix Analysis</i></b><br>LT Morgan Holden – USCG, Office of Requirements and Analysis  |
| 6              | <i>No Nomination</i>   |
| 7              | <b><i>Performance of Search Strategies for Explosive Production Facilities</i></b><br>Bryon Tipton – MIT Lincoln Laboratory                              |
| 8              | <b><i>Closed-Form Approximation of Target Revisits by Low-Altitude Spacecraft</i></b><br>Dr. Roger Burk – USMA   |
| 9              | <b><i>Estimating Unknown ASBM Sensor Parameters</i></b><br>Dr. Matthew Vanderhill – MIT Lincoln Laboratory   |
| 10             | <b><i>US Coast Guard Fleet Mix Analysis</i></b><br>LT Morgan Holden – USCG, Office of Requirements and Analysis  |
| 11             | <b><i>Brigade Combat Team (BCT) Small Unmanned Aircraft Systems Study</i></b><br>Michael Tavares – TRADOC Analysis Center, TRAC Ft. Leavenworth          |
| 12             | <b><i>Analysis of Broad Area Maritime Surveillance, Persistent ISR, in MCO-1</i></b><br>Eric Thompson – NAVAIR – 4.10 Warfare Analysis                   |
| 13             | <i>No Nomination</i>   |



## Barchi Prize Nominations

2012 Nominees selected as the best paper in their working group,  
composite group or other session at the 79th MORSS

| WG/<br>Session | Title and Authors   |
|----------------|---|
| 14             | <i>Using Diachronic Nonlinear Portfolio Analysis to Perform Complexity Agnostic Lifecycle Effectiveness Modeling</i><br>Clint Johnson – Lockheed Martin |
| 15             | <i>An Example of Using Clustering to Improve Predictions</i><br>LT Kimberly Shenk – 13 AF/A9  |
| 16             | <i>Global Access and Infrastructure Assessment</i><br>Diane Breivik Allen – USTC – Northrop Grumman   |
| 17             | <i>Insights From the Simulation of a U.S. Naval Aircraft Overhaul Facility</i><br>Susan Heath - NPS   |
| 18             | <i>Army Force Generation (ARFORGEN) Officer Flow Model</i><br>John Pinter and Eugene Lesinski – USMA and USAAC (respectively)                           |
| 19             | <i>Managing Cost-Wise Readiness in a Dynamic Environment</i><br>Martin White – Booz Allen Hamilton  |
| 20             | <i>Cyberspace Training Initiative</i><br>Erika Banks and Tim Kemper – US STRATCOM/J7  |
| 21             | <i>No Nomination</i>  |
| 22             | <i>Benefit-Dollar Translation Function (BDTF)</i><br>Thomas Cannon – NSWC, Indian Head Division   |
| 23             | <i>Modeling, Simulation and Analysis in Support of CH-53K Capability-Based Test and Evaluation</i><br>Phi TranNguyen – ManTech                          |
| 24             | <i>The Shortcut of Fully Burdened Cost of Fuel Analysis</i><br>Kristopher Atkins – The Boeing Company   |
| 25             | <i>Energy Reduction Opportunity-Cost Analysis &amp; Optimization System</i><br>Rick Cline and Sudhakar Reddy – The Boeing Company                       |
| 26             | <i>PEO GCS Modernization Analysis Tool</i><br>Shatiel Edwards and Brett Haas - Program Executive Office, Ground Combat Systems                          |

## Barchi Prize Nominations

2012 Nominees selected as the best paper in their working group,  
composite group or other session at the 79th MORSS

| WG/<br>Session | Title and Authors   |
|----------------|---|
| 27             | <i>High Resolution Simulation and Analysis of Mobile Ad-Hoc Network Technology in the US Marine Corps Infantry Battalion</i><br>Capt. Paul Nicholas, Mr. Josh Pepper, Maj Mark Muratore, USMC, Mr. David Gibbons, Mrs. Carol Weaver - MCCDC/OAD |
| 28             | <i>No Nomination</i>  |
| 29             | <i>High Performance Agent-Based Modeling and Simulation</i><br>Dr. Michael North – Argonne National Laboratory  |
| 30             | <i>Link Bias in Strategic Network Formation Games</i><br>Shaun Lichter, C. Griffin, and T. Friesz – The Pennsylvania State University   |
| 31             | <i>Modeling Cell Phone Networks as Multi-layered Networks</i><br>Capt Ryan McGuire - AFIT   |
| 32             | <i>AF ISR and the Army Tactical Aerial Layer</i><br>Brian Rose and Glenn VanDerWoude – Air Force HAF/A9   |
| 33             | <i>Scenario Development for the Joint Irregular Warfare Analytical Baseline</i><br>Alec Barker and Yuna Wong – MCCDC/OAD  |
| 34             | <i>Asymmetric Threat Human Network Behavior Signatures From COMINT</i><br>Dr. Laura Hitt – 21 <sup>st</sup> Century Technologies  |
| CG A           | <i>Design in Practice: The U.S. –Mexico Border</i><br>Dr. Matthew Schmidt and Dr. Alexander Ryan – School of Advanced Military Studies  |
| CG B           | <i>Brigade Combat Team Small Unmanned Aircraft Systems Study</i><br>Michael Tavares – TRADOC Analysis Center, TRAC Ft. Leavenworth  |
| CG C           | <i>Balanced Enemy Attack Sortie Suppression Tool</i><br>Lauren Murphy – OSD/CAPE  |
| CG D           | <i>An Analytic Approach to Army Force Structure</i><br>COL Steve Stoddard, COL Clark Heidelbaugh, COL Scott Schutzmeister, Jeff Hall - CAA  |

## Barchi Prize Nominations

2012 Nominees selected as the best paper in their working group, composite group or other session at the 79th MORSS

| <b>WG/<br/>Session</b> | <b>Title and Authors</b>  |
|------------------------|---|
| CG E                   | <i>No Nomination</i>  |
| CG F                   | <i>Search Analysis for the Location of the AF447 Underwater Wreckage</i><br>Colleen Keller – Metron, Inc.   |
| CG G                   | <i>IW Campaign Analysis: US/UK IJC Model-Supported War Game</i><br>CDR Djamal Pullom – Joint Staff, J-8/WAD   |
| FS 1                   | <i>No Nomination</i>  |
| FS 2                   | <i>No Nomination</i>  |
| DWG 1                  | <i>The Role of Tradeoff Analysis in Human Systems Integration</i><br>Lt Col Anthony P. Tvaryanas, M.D., PhD and Dr. Nina Shattuck – Naval Postgraduate School |
| DWG 2                  | <i>AF ISR and the Army Tactical Aerial Layer</i><br>Brian Rose and Glenn VanDerWoude – Air Force HAF/A9   |