2. SPECIAL RECOGNITIONS

2.1. FACULTY FELLOWS

Badiru, Adedeji B., Professor and Head Department of Systems and Engineering Management, Fellow of the Institute of Industrial Engineers, Fellow of the Nigerian Academy of Engineering.

Bridgman, Charles J., Professor Emeritus of Nuclear Engineering, Department of Engineering Physics, Fellow of the American Nuclear Society.


Elrod, William E., Professor Emeritus of Aerospace Engineering, Department of Aeronautics and Astronautics, Fellow of American Society of Mechanical Engineers International.

Franke, Milton E., Professor Emeritus of Aerospace Engineering, Department of Aeronautics and Astronautics, Fellow of the American Society of Mechanical Engineers.

Goltz, Mark N., Professor of Engineering and Environmental Management, Department of Systems Engineering and Management, Fellow of the Society of American Military Engineers.

Grimaila, Michael R., Associate Professor of Systems Engineering, Department of Systems and Engineering Management, Fellow of the Information System Security Association.

Hengehold, Robert L., Professor of Physics, Department of Engineering Physics, Fellow of the American Physical Society.

Houpis, Constantine H., Professor Emeritus of Electrical Engineering, Department of Electrical and Computer Engineering, Fellow of the Institute of Electrical and Electronic Engineers.

Mall, Shankar, Distinguished Professor of Aerospace Engineering, Department of Aeronautics and Astronautics, Fellow of the American Society of Mechanical Engineers International.

Maybeck, Peter S., Professor Emeritus of Electrical Engineering, Department of Electrical and Computer Engineering, Fellow of the Institute of Electrical and Electronic Engineers.

Pachter, Meir, Distinguished Professor of Electrical Engineering, Department of Electrical and Computer Engineering, Fellow of the Institute of Electrical and Electronic Engineers.

Palazotto, Anthony N., Professor of Aerospace Engineering, Department of Aeronautics and Astronautics, Fellow of American Institute of Aeronautics and Astronautics, Fellow of the American Academy of Mechanics and the American Society of Civil Engineers.

Perram, Glen P., Professor of Physics, Department of Engineering Physics, Fellow of the Directed Energy Professional Society.

Pignatiello, Joseph J., Professor of Operations Research, Department of Operational Sciences, Fellow of the American Society for Quality.

Raquet, John F., Associate Professor of Electrical Engineering, Department of Electrical and Computer Engineering, Fellow of the Institute of Navigation.

Ruggles-Wrenn, Marina B., Professor of Aerospace Engineering, Department of Aeronautics and Astronautics, Fellow of the American Society of Mechanical Engineers International.
Terzuoli, Andrew J., Associate Professor of Electrical Engineering, Department of Electrical and Computer Engineering, Fellow of the Electromagnetics Academy.

Thomas, Marlin U., Dean, Graduate School of Engineering and Management, Air Force Institute of Technology, Fellow of the Institute of Industrial Engineers, Fellow of the American Society for Quality, Fellow of the Institute for Operations Research and Management.

2.3. RESEARCH AND TEACHING AWARDS

2.3.1. FACULTY

AKERS, BENJAMIN F.,
ENC Instructor of the Quarter, 2011 Fall Quarter.
ENC Instructor of the Quarter, 2012 Spring Quarter.
SOCHE Faculty Excellence in Teaching Award (2012).

BAILEY, WILLIAM F.
2012 Science, Technology, Engineering and Mathematics (STEM) Award for AF Outstanding Science and Engineering Educator.

BUTTS, JONATHAN W., Maj
Mr. Lopez, Maj Butts and Capt Larkin, won 1st place on their poster entitled “Evaluation of Traditional Security Solutions in the SCADA Environment” at the ICIW-2012 Conference.

COLLINS, PETER J.

COUTU, RONALD A.

DUBE, THOMAS E., Maj
Awarded the Stanley N. Roscoe Award sponsored by the Aerospace Human Factor’s Association, 2012.

ERICH, ROGER A., Capt
ENC Instructor of the Quarter, 2012 Summer Quarter.

FICKUS, MATTHEW C.
2011 Air Education and Training Command Civilian Educator of the Year.

FISHER, KENNETH A., Lt Col
Received the Outstanding Military Professor Award, sponsored by the Military Officers Association of America and is given to recognize the military professor who has demonstrated excellence in teaching, research, and service.

FRIEND, MARK A., Lt Col
Recognized as an Ohio Magazine “Excellence in Education” Honoree, November 2011.
Winner of the 2012 Southwestern Ohio Council for Higher Education (SOCHE) Faculty Excellence Award.

GRIMAILA, MICHAEL R.

2012 Colonel Charles Stone Award, AFIT Board of Visitors.

2012 Researcher of the Year, Department of Systems and Engineering Management.

GROSS, KEVIN C.


Best Paper Award at the 9th International Symposium on Special Topics in Chemical Propulsion (9-ISICP) in Québec City (9-13 July 2012) for “Imaging Fourier-transform Spectrometry for Plume Diagnostics and Code Validation.”

HAYRILLA, MICHAEL J.


JACKSON, JULIE A.

Air Force Winner – Air Force Junior Civilian Scientist/Engineer Award 2012.

KOWASH, BENJAMIN R., Maj

Professor Ezra Kotcher Award, Wright Memorial Chapter, Air Force Association.

MILLER, JOHN O.

Department of Operational Sciences Faculty of the Quarter, Fall 2011 (student nominated award).

MILLER, MICHAEL E.

2012 Industrial and Systems Research Conference, Best Paper Award: Engineering Economy Track.

MULLINS, BARRY E.

Cage H. Crocker Outstanding Professor Award for CY2011, awarded by AFIT Board of Visitors.

John A. Curtis Lecture Award from the Computers in Education Division, American Society for Engineering Education (ASEE) Annual Conference; Best paper and presentation-#1 of 68.


Best Paper (#1 of 58) in the Computers in Education Division at the 2012 American Society for Engineering Education (ASEE) Conference in San Antonio Texas. He presented his paper “Developing Cyber Warriors from Computer Engineers et al.” at the “Best of Computers in Education Division” session.

POLANKA, MARC D.

Faculty Excellence Award for Teaching, SOCHE, 2012.

AIAA Special Service Citation, 2012.
RACZ, LEEANN, Maj
2012 Scholar of the Year, Department of Systems and Engineering Management.
2012 Faculty Excellence in Teaching Award, Southern Ohio Council for Higher Education.

RAQUET, JOHN F.
General Bernard A. Schriever Award; Awarded in recognition of an individual who advances aerospace power, technology, doctrine, or the Air Force as a profession (June 2012).

REEDER, MARK F.
Letter of commendation from AFRL/RB for work in the Trisonic Gas Facility (December 2011).

SANDLIN, DORAL E., Lt Col
2011-2012 Instructor of the Year Awarded by the Advanced Study in Air Mobility Class of 2012, Joint Base McGuire-Dix-Lakehurst, New Jersey.

SCHULTZ, KENNETH L.
Department of Operational Sciences Faculty of the Quarter, Winter 2012 (student nominated award).

WEIR, JEFFERY D.
Department of Operational Sciences Faculty of the Quarter, Summer 2011 (student nominated award, announced 19 Dec 2011).

WHITE, EDWARD D., III
ENC Instructor of the Quarter, 2012 Winter Quarter.
Dr. Leslie M. Norton Teaching Excellence Award, 2012.
2.3.2. STUDENTS

BENTLEY, BROOK I.


BEVINS, JAMES

IEEE Nuclear and Plasma Physics Society Graduate Scholarship Award for his AFIT thesis research.

BURLEY, JARRED L.

Air Force Institute of Technology Louis F. Polk Award, March 2012.

DIEHL, DANIEL C.

June 2012 Mervin E. Gross Award for demonstrating the most exceptional academic achievement and high qualities of character, initiative, and leadership by a graduating student.

DRIYLIE, SCOTT T.

2012 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Systems Engineering and Management. Thesis title: “Predictors and Predictive Effects of Attitudinal Inconsistency Towards Organizational Change.”

EKHOLM, JARED M.

Advanced Technical Intelligence Association (ATIA) Association Outstanding Student Award, March 2012.

ENGLERT, JOHN


FITZGERALD, JACK G.

2012 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Engineering Physics. Thesis title: “A Programmable Liquid Collimator for Both Coded Aperture Adaptive Imaging and Multiplexed Compton Scatter Tomography.”

2012 Commandant's Award for the most exceptional master’s thesis by a graduating student in the Department of Engineering Physics. Thesis title: “A Programmable Liquid Collimator for Both Coded Aperture Adaptive Imaging and Multiplexed Compton Scatter Tomography.”

FINDLEY, JONATHAN S.

March 2012 Mervin E. Gross Award for demonstrating the most exceptional academic achievement and high qualities of character, initiative, and leadership by a graduating student.

FLORA, THOMAS J.

Dayton-Cincinnati Aerospace Sciences Symposium Best Presentation Award, 2012.
FRANZ, TIM

Graduate School’s Department of Electrical and Computer Engineering alumni (MS-Graduate Cyberspace Operations program) and a Cyber 300 graduate was selected as one of three winners of the Ira C. Eaker Award for the top Air and Space Power Journal article of the past year. The award winning paper was titled “The Cyber Warfare Professional: Realizations for Developing the Next Generation” and was written as part of the Cyber 300 course requirements.

GLASSBURNER, AARON V.

March 2012 Jerome G. Peppers, Jr. Outstanding Student Award, International Society of Logistics (SOLE) award for his academic record and contributions to the field of logistics. Thesis title: “Evaluation of Inventory Reduction Strategies: Balad Air Base Simulation Case Study.”

GLAUVITZ, NATHAN E.


GUTIERREZ DEL ARROYO, JOSE


HAMMOND, GLENN B., II


HANSON, COLIN Q.

Dayton-Cincinnati Aerospace Sciences Symposium Best Presentation Award in Fluid Dynamics and Aeroelasticity, 2012.

HARNLY, MARIE T.

2012 Dimitroff Outstanding Student Thesis Award.

HOLLENBECK, ALEX C.

2012 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Aeronautics and Astronautics. Thesis title: “Evaluation of the Thorax Manducca Sexta for Flapping Wing Micro Air Vehicle Applications.”

KINNE, JEREMY P.

2012 Society of American Military Engineers Engineering Management Student Leadership Award.

JURADO, JUAN

Received the AFIT Navigation Research Excellence Award, Sponsored by the Dayton section of the Institute of Navigation, which is awarded for the master’s thesis reflecting the most exceptional research contribution to scientific or engineering knowledge in the navigation area.
2012 Dean’s Award for the most exceptional master’s thesis by a graduating student from the Department of Electrical and Computer Engineering. Thesis title: “Enhanced Image-Aided Navigation Algorithm with Automatic Calibration and Affine Distortion Prediction.”

LANE, CORY T.

Air Force Institute of Technology Lt Edwin E. Aldrin Leadership Award, March 2012.

LARKIN, ROBERT D.

Mr. Lopez, Maj Butts and Capt Larkin, won 1st place on their poster entitled “Evaluation of Traditional Security Solutions in the SCADA Environment” at the ICIW-2012 Conference.

LU, QUAN-HAI T.


LYNCH, SARAH R.

June 2012 Air Force Historical Association Bryce E. Poe II Award for the thesis or graduate research project providing the most significant contribution to an understanding of the historical factors affecting an Air Force or Department of Defense problem, event or process. GPR Title: “RPA Performing the Air-Refueling Mission.”

MCNABB, MARCUS E.

2011 Air Force Company Grade Lessons Learned Military Professional of the Year, awarded by the Analytical Community at the annual Air Force Analysis/Lessons Learned (A2L2) Awards Ceremony, 23 Oct 2011.

MCPHERSON, ANDREW W.E.


MIDDLETON, CHARLES J.

June 2012 Louis F. Polk Award sponsored by the National Defense Industrial Association (NDIA), awarded in recognition of the student who has made an advanced contribution in their professional field in direct furtherance of the objectives of NDIA. GPR title: “Risk Assessment Planning for Airborne Systems: An Information Assurance Failure Mode, Effects and Criticality Analysis Methodology.”

MILLER, KARI A.

March 2012 Secretary James G. Roche Award honoring the graduating enlisted student who best demonstrates academic, leadership, research, and service achievements.

MORRIS, JAMES F.

OBERSON, FREDRIC M.

June 2012 Jerome G. Peppers, Jr. Outstanding Student Award, International Society of Logistics (SOLE) award for his academic record and contributions to the field of logistics. GRP Title: “Analysis of CENTCOM Commercial Intra-Theater Airlift Costs.”

SAIE, CADE M.

March 2012 Military Operations Research Society (MORS) award for the graduate thesis or graduate research project judged to demonstrate the best application of operations research methodology or theory development to a military problem. Thesis title: “Understanding the Instruments of National Power through a System of Differential Equations in a Counterinsurgency.”

STEINBOCK, MICHAEL J.

Presented paper and received scholarship at annual SPIE Optics and Photonics Conference in California.

SMITH, LINDSAY N.

2012 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Mathematics and Statistics. Thesis title: “Determining Angular Frequency from Video with a Generalized Fast Fourier Transform.”

STORM, SCOTT M.

2012 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Operational Sciences. Thesis title: “Evaluating Aerial Refueling Simulator Validation Test Designs by Extending Response Surface Methodology to Analyze Time History Responses.”

VAIRA, BRADY J.

June 2012 Military Operations Research Society (MORS) award for the graduate thesis or graduate research project judged to demonstrate the best application of operations research methodology or theory development to a military problem. GRP Title: “Estimating Bird/Aircraft Collision Probabilities and Risk Utilizing Spatial Poisson Processes.”

2.3.3. STAFF

LOPEZ, JUAN, Ctr

Selected by the Governor’s Ohio Latino Affairs Commission as a Distinguished Hispanic Ohioan for exemplary achievements and contributions to the Hispanic community.

Mr. Lopez, Maj Butts and Capt Larkin, won 1st place on their poster entitled “Evaluation of Traditional Security Solutions in the SCADA Environment” at the ICIW-2012 Conference.

2.3.4. TEAMS

AIAA CHAPTER

AIAA Outstanding Section Award, Very Large Category, 1st Place, 2012.
ANT CENTER

Award for the ANT Center being honored as a “Pioneer in Precision Navigation” and being made a Jimmy Doolittle Educational Fellow of the Air Force Association, AFA Symposium in Orlando, FL.

CCR CYBER 200/300 TEAM

Selected as the winner of the 2011 Government Information Security Leadership Award (GISLA) for demonstrated leadership in advancing and improving the information security workforce. The award is given by the International Information Systems Security Certification Consortium, Inc., the world's largest not-for-profit information security professional body.

Certificate of Special U.S. Congressional Recognition presented to AFIT's Center for Cyberspace Research - Cyber 200/300 Professional Continuing Education Team.

DELTA XI CHAPTER

AFIT’s Delta Xi chapter of the Eta Kappa Nu Electrical and Computer Engineering Honor Society Outstanding Chapter Award 2010-2011. Designated an “Outstanding Chapter” by the national organization. Chapters were judges on their activities of service to others during academic year 2010-2011. An award plaque was presented at the Electrical and Computer Engineering Department Head’s Association’s annual meeting in March at the University of Texas at Austin.
3.4. EXTERNAL SPONSOR FUNDING FOR THE GRADUATE SCHOOL OF ENGINEERING AND MANAGEMENT

Many of the Graduate School of Engineering and Management’s theses and research projects completed under faculty supervision (sponsored or unsponsored) are funded in part by other Air Force, DOD and government units and agencies. Often, this funding results from collaboration between faculty and thesis sponsors and occurs when the research project can be leveraged by the purchase of equipment or services not otherwise available. Tables 3.4 and 3.5, and Figure 3.3, summarize external funding for FY12, and Figure 3.2 summarizes the past ten fiscal years of sponsored funding.

Table 3.4 FY12 External Funding & Research Expenditures for Academic Departments & Research Centers ($1,000’s)

<table>
<thead>
<tr>
<th>Department</th>
<th>Newly Awarded Research Projects</th>
<th>Newly Awarded Education Projects</th>
<th>Total FY12 Newly Awarded Projects</th>
<th>Total FY12 Research Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># $k</td>
<td># $k</td>
<td># $k</td>
<td>$k</td>
</tr>
<tr>
<td>Mathematics &amp; Statistics (ENC)</td>
<td>13 587</td>
<td>-</td>
<td>13 587</td>
<td>562</td>
</tr>
<tr>
<td>Electrical &amp; Computer Eng (ENG)</td>
<td>59 6,044</td>
<td>3 844</td>
<td>62 6,888</td>
<td>8,348</td>
</tr>
<tr>
<td>Engineering Physics (ENP)</td>
<td>41 5,177</td>
<td>2 64</td>
<td>43 5,242</td>
<td>6,151</td>
</tr>
<tr>
<td>Research &amp; Sponsored Programs (ENR)</td>
<td>1 19</td>
<td>1 36</td>
<td>2 55</td>
<td>17</td>
</tr>
<tr>
<td>Operational Sciences (ENS)</td>
<td>13 6,089</td>
<td>-</td>
<td>13 6,089</td>
<td>5,250</td>
</tr>
<tr>
<td>Systems &amp; Eng Management (ENV)</td>
<td>14 1,019</td>
<td>-</td>
<td>14 1,019</td>
<td>1,547</td>
</tr>
<tr>
<td>Aeronautical &amp; Astronautical Eng (ENY)</td>
<td>49 3,433</td>
<td>2 40</td>
<td>51 3,473</td>
<td>5,180</td>
</tr>
<tr>
<td>TOTAL</td>
<td>190 22,369</td>
<td>8 984</td>
<td>198 23,353</td>
<td>27,055</td>
</tr>
</tbody>
</table>

Center

<table>
<thead>
<tr>
<th>Center</th>
<th>Newly Awarded Research Projects</th>
<th>Newly Awarded Education Projects</th>
<th>Total FY12 Newly Awarded Projects</th>
<th>Total FY12 Research Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Navigation Technology (ANT)</td>
<td>20 1,214</td>
<td>-</td>
<td>20 1,214</td>
<td>2,179</td>
</tr>
<tr>
<td>Center for Cyberspace Research (CCR)</td>
<td>11 2,694</td>
<td>2 839</td>
<td>13 3,533</td>
<td>2,331</td>
</tr>
<tr>
<td>Center for Directed Energy (CDE)</td>
<td>17 2,533</td>
<td>1 19</td>
<td>18 2,552</td>
<td>3,297</td>
</tr>
<tr>
<td>Center for Tech Intel Studies &amp; Research (CTISR)</td>
<td>8 1,341</td>
<td>-</td>
<td>8 1,341</td>
<td>1,140</td>
</tr>
<tr>
<td>Center for Operational Analysis (COA)</td>
<td>12 6,004</td>
<td>-</td>
<td>12 6,004</td>
<td>5,212</td>
</tr>
<tr>
<td>TOTAL</td>
<td>68 13,786</td>
<td>3 858</td>
<td>71 14,644</td>
<td>14,159</td>
</tr>
</tbody>
</table>

Notes: Total research expenditures reported include institutional cost sharing, which is not included in newly awarded projects. Numbers reported to the ASEE and NSF research expenditure surveys vary somewhat due to differences in definitions. All Center funds are also included in departmental funding.

Figure 3.2 New Award History FY03-FY12

[Graph showing new award history from FY03 to FY12]
Table 3.5 New FY12 Awards to Academic Departments & Research Centers by Sponsor

<table>
<thead>
<tr>
<th>Dept.</th>
<th>AFRL (Non-AFRL)</th>
<th>AFMC</th>
<th>Other USAF</th>
<th>Other DOD</th>
<th>NSF</th>
<th>Other Federal</th>
<th>Non-Federal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC</td>
<td>410</td>
<td>-</td>
<td>-</td>
<td>70</td>
<td>81</td>
<td>26</td>
<td>-</td>
<td>587</td>
</tr>
<tr>
<td>ENG</td>
<td>2,658</td>
<td>110</td>
<td>396</td>
<td>2,739</td>
<td>715</td>
<td>270</td>
<td>-</td>
<td>6,888</td>
</tr>
<tr>
<td>ENP</td>
<td>1,400</td>
<td>-</td>
<td>636</td>
<td>3,136</td>
<td>-</td>
<td>50</td>
<td>20</td>
<td>5,242</td>
</tr>
<tr>
<td>ENR</td>
<td>19</td>
<td>-</td>
<td>-</td>
<td>36</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>ENS</td>
<td>152</td>
<td>375</td>
<td>1,436</td>
<td>4,126</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,089</td>
</tr>
<tr>
<td>ENV</td>
<td>114</td>
<td>-</td>
<td>238</td>
<td>332</td>
<td>-</td>
<td>334</td>
<td>-</td>
<td>1,019</td>
</tr>
<tr>
<td>ENY</td>
<td>1,770</td>
<td>30</td>
<td>722</td>
<td>860</td>
<td>-</td>
<td>-</td>
<td>91</td>
<td>3,473</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6,523</td>
<td>515</td>
<td>3,428</td>
<td>11,263</td>
<td>832</td>
<td>680</td>
<td>111</td>
<td>23,353</td>
</tr>
</tbody>
</table>

Note: “Other DOD” in this table includes the DTRA, HELJTO, OSD, TRICARE, NGA and NSA pie slices from Figure 3.3, plus funding from other DOD organizations.

Research

<table>
<thead>
<tr>
<th>Center</th>
<th>AFRL</th>
<th>AFMC</th>
<th>Other USAF</th>
<th>Other DOD</th>
<th>NSF</th>
<th>Other Federal</th>
<th>Non-Federal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT</td>
<td>849</td>
<td>-</td>
<td>75</td>
<td>-</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>1,214</td>
</tr>
<tr>
<td>CCR</td>
<td>181</td>
<td>-</td>
<td>2,422</td>
<td>710</td>
<td>220</td>
<td>-</td>
<td>-</td>
<td>3,533</td>
</tr>
<tr>
<td>CDE</td>
<td>1,074</td>
<td>-</td>
<td>1,478</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,552</td>
</tr>
<tr>
<td>CTISR</td>
<td>-</td>
<td>-</td>
<td>345</td>
<td>951</td>
<td>-</td>
<td>25</td>
<td>20</td>
<td>1,341</td>
</tr>
<tr>
<td>COA</td>
<td>152</td>
<td>375</td>
<td>1,436</td>
<td>4,041</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,004</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,256</td>
<td>375</td>
<td>2,021</td>
<td>8,967</td>
<td>710</td>
<td>295</td>
<td>20</td>
<td>14,644</td>
</tr>
</tbody>
</table>

Note: All Center funds are also included in departmental funding.