2. SPECIAL RECOGNITIONS

2.1. FACULTY FELLOWS

Badiru, Adedeji B., Dean, Graduate School of Engineering and Management, Fellow of the Institute of Industrial Engineers, Fellow of the Nigerian Academy of Engineering.

Butts, Jonathan W., Maj, Fellow National Board of Information Security Examiners.

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., Professor and Head, Department of Systems Engineering and Management, Fellow of the Information System Security Association.

Hengehold, Robert L., Professor Emeritus 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, 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.

Nurre, Sarah G., Assistant Professor of Operations Research, Department of Operational Sciences, Fellow New Faculty Fellowship Program.

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., Distinguished 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; Fellow of the Engineering Mechanics Institute.

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

Pignatiello, Joseph J., Professor and Head, Department of Operational Sciences, Fellow of the Institute of Industrial Engineers, Fellow of the American Society for Quality.
Polanka, Marc D., Associate Professor of Aerospace Engineering, Department of Aeronautics and Astronautics, Fellow of the American Society of Mechanical Engineers International.

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 (FEMA).

RESEARCH AND TEACHING AWARDS

2.2.1. FACULTY

AHNER, DARRYL K.
2014 Council of Supply Chain Management Professionals E. Grosvenor Plowman Award.

AKERS, BENJAMIN F.
Ohio Magazine, Excellence in Education Award, Dec 2013.

BADIRU, ADEDEJI B.
Air Education and Training Command National Public Service Award.

BRIDGEMAN, CHARLES J.
Air Force Nuclear Weapons Center Order of the Nucleus.

BURGGRAF, LARRY W.
2013 AETC Nuclear Deterrence Operations Professional Team of the Year Award.

CHAMPAGNE, LANCE E., Lt Col
ENC Instructor of the Quarter, 2014 Winter Quarter.

COLOMBI, JOHN M.
2013 Department Researcher of the Year Award.

FICKUS, MATTHEW C.
ENC Instructor of the Quarter, 2013 Fall Quarter.
ENC Instructor of the Quarter, 2014 Spring Quarter.

FREELS, JASON K., Maj
The Lloyd S. Nelson Award: Awarded by the American Society for Quality (Statistics Division) - This award recognized the paper “Accelerated Test Methods for Reliability Prediction,” by David H. Collins, Jason K. Freels, Aparna V. Huzurbazar, Richard L. Warr and Brian P. Weaver published in Journal of Quality Technology as the technical paper with the “Greatest Immediate Impact to Practitioners” for 2014.

HARPER, WILLIE F., Jr.
2013 Department Journal Publication of the Year.

HILL, RAYMOND R.,
SOCHE Outstanding Educator, Nov 2014.
JOHNSON, ALAN W.,
SIE Instructor Award for Outstanding Contributions to the Understanding of Management Sciences, Sigma Beta Chapter, Mar 2014

KOWASH, BENJAMIN R.
2013 AETC Nuclear Deterrence Operations Professional Team of the Year Award.

LIU, DAVID, Capt

LUNDAY, BRIAN J., LTC
Indoctrinated into Omega Rho (Operations Research Honor Society), Feb 2014.
Dr. Leslie M. Thornton Teaching Excellence Award (AFIT Student Association), Mar 2014.
Faculty Member of the Year, Advanced School of Air Mobility (ASAM), Jun 2014.

MARTIN, RICHARD K.
2014 Air Force Outstanding Science and Engineering Educator Award.

MATHEWS, KIRK A., Maj
2013 AETC Nuclear Deterrence Operations Professional Team of the Year Award.

MCCLORY, JOHN W.
2013 AETC Nuclear Deterrence Operations Professional Team of the Year Award.

MCHALE, STEPHEN R., LTC
2014 Southwest Ohio Council on Higher Education (SOCHE) Faculty Excellence in Teaching Award.
2013 AETC Nuclear Deterrence Operations Professional Team of the Year Award.

MULLINS, BARRY E.
Ohio Magazine, Excellence in Education Award, Nov 2013.

NURRE, SARAH G.

OGDEN, JEFFREY A.
2014 Professor Ezra Kotcher Award, May 2014.
PERRAM, GLEN P.
2013 Air Force Outstanding Scientist/Engineer Award - Senior Civilian Category.

PETROSKY, JAMES C.
2013 AETC Nuclear Deterrence Operations Professional Team of the Year Award.

POLANKA, MARC D.
Ohio Magazine, Excellence in Education Award, Dec 2013.

RACZ, LEEANN, Lt Col
2013 Air Education and Training Command Educator of the Year Award.
2013 Military Officers Association of America AFIT Outstanding Military Faculty of the Year Award.

RAQUET, JOHN F.
The General Bernard A. Schriever Award, May 2014.

ROBBINS, MATTHEW J., Lt Col
2014 Outstanding Young OR/MS Award, INFORMS Cincinnati-Dayton Chapter, Aug 2014.

TUTTLE, RONALD F.
2013 AETC Nuclear Deterrence Operations Professional Team of the Year Award.

WARR, RICHARD L., Lt Col
Lloyd Nelson Award for the 2013 Journal of Quality Technology article with the “greatest immediate impact to practitioners,” 2014.

YAMAMOTO, DIRK P., Lt Col
2013 Department Faculty Scholar of the Year Award.
2013 Defense Education and Training (DETN) Broadcast Team of the Year, AFIT Civil Engineer School WENV 220 Unit Environmental Coordinator (UEC) Satellite Course.

2.2.2. STUDENTS

BURGER, JOSHUA A.
2014 AFIT Louis F. Polk Award Winner.

DENEVE, ALLEN J.
Project Management Institute award, Mar 2014.
HOLDER, JOEL G.

2014 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Engineering Physics. Thesis title: “Polarimetric Calibration and Characterization of the Telops Field Portable Polarimetric-Hyperspectral Imager.”

JABLONSKI, JAMES A.

2014 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Operational Sciences. Thesis title: “Reconstruction Error and Principal Component Based Anomaly Detection in Hyperspectral Imagery.”

JEROSKI, JUSTINE D.


LEVENE, DAVID L.


MATACZYNISKI, MARK R.

2014 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Aeronautics and Astronautics. Thesis title: “Design and Simulation of a Pressure Wave Supercharger for a Small Two-Stroke Engine.”

NEAL, CHARLES J.

2014 AFIT Systems Engineering Award.

NELSON, AARON A.

2014 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Mathematics and Statistics. Thesis title: “About Phase: Synthetic Aperture Radar and the Phase Retrieval.”

PACK, ANDREW J.

Best Graduate Student Paper Award, Western Decision Sciences Institute Annual Meeting, Apr 2014.

PETTER, JACOB L.

International Cost Estimating and Analysis Association (ICEAA) award for the most outstanding thesis contribution to the cost community, Mar 2014.

QUINTON, MATTHEW J.

2014 American Institute of Aeronautics and Astronautics Dayton-Cincinnati Graduate Student Award for Research Excellence.

RECKER, MATTHEW C.

2014 American Nuclear Society AFIT Chapter Thesis Award.
SLAUGHTER, ROBERT C.

SUTHERLIN, JASON W.

SYNOVEC, THOMAS M.
2014 Dean’s Award for the most exceptional master’s thesis by a graduating student in the Department of Systems Engineering and Management. Thesis title: “Investigation on the Use of Equivalency Factors for the Design and Evaluation of Flexible Airfield Pavements.”
3.3. 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. Figure 3.2 summarizes the past ten fiscal years of sponsored funding. Tables 3.3 and 3.4, and Figure 3.3, summarize external funding for FY14.

Table 3.3 FY14 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 FY14 Newly Awarded Projects</th>
<th>Total FY14 Research Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics &amp; Statistics (ENC)</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>331</td>
</tr>
<tr>
<td>Electrical Eng &amp; Computer Eng (ENG)</td>
<td>69</td>
<td>3</td>
<td>72</td>
<td>6,729</td>
</tr>
<tr>
<td>Engineering Physics (ENP)</td>
<td>44</td>
<td>1</td>
<td>45</td>
<td>4,153</td>
</tr>
<tr>
<td>Research &amp; Sponsored Programs (ENR)</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Operational Sciences (ENS)</td>
<td>17</td>
<td>5</td>
<td>22</td>
<td>4,173</td>
</tr>
<tr>
<td>Systems Eng &amp; Management (ENV)</td>
<td>14</td>
<td>-</td>
<td>14</td>
<td>4,153</td>
</tr>
<tr>
<td>Aeronautical &amp; Astronautical Eng (ENY)</td>
<td>44</td>
<td>2</td>
<td>46</td>
<td>2,572</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>194</strong></td>
<td><strong>12</strong></td>
<td><strong>206</strong></td>
<td><strong>18,655</strong></td>
</tr>
</tbody>
</table>

Center

<table>
<thead>
<tr>
<th></th>
<th><strong>Dollar Amount Awarded (Millions)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autonomy and Navigation Technology (ANT)</strong></td>
<td>3,104</td>
</tr>
<tr>
<td><strong>Center for Cyberspace Research (CCR)</strong></td>
<td>648</td>
</tr>
<tr>
<td><strong>Center for Directed Energy (CDE)</strong></td>
<td>2,128</td>
</tr>
<tr>
<td><strong>Center for Operational Analysis (COA)</strong></td>
<td>3,953</td>
</tr>
<tr>
<td><strong>Center for Space Research and Assurance (CSRA)</strong></td>
<td>1,347</td>
</tr>
<tr>
<td><strong>Center for Tech Intel Studies &amp; Research (CTISR)</strong></td>
<td>916</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12,096</strong></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.

*1.3M of STAT COE funding is captured under COA.
Figure 3.3 New FY14 Awards by Sponsor

![Pie Chart on the right shows breakdown by AFRL Technology Directorates](image)

Table 3.4 New FY14 Awards to Academic Departments & Research Centers by Sponsor

<table>
<thead>
<tr>
<th>Dept.</th>
<th>AFRL</th>
<th>AFMC (Non-AFRL)</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>316</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>331</td>
</tr>
<tr>
<td>ENG</td>
<td>3,683</td>
<td>140</td>
<td>331</td>
<td>1,508</td>
<td>842</td>
<td>225</td>
<td>-</td>
<td>6,729</td>
</tr>
<tr>
<td>ENP</td>
<td>1,424</td>
<td>-</td>
<td>460</td>
<td>1,992</td>
<td>-</td>
<td>266</td>
<td>11</td>
<td>4,153</td>
</tr>
<tr>
<td>ENR</td>
<td>19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>19</td>
</tr>
<tr>
<td>ENS</td>
<td>385</td>
<td>275</td>
<td>460</td>
<td>3,053</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,173</td>
</tr>
<tr>
<td>ENV</td>
<td>212</td>
<td>-</td>
<td>32</td>
<td>230</td>
<td>10</td>
<td>194</td>
<td>-</td>
<td>678</td>
</tr>
<tr>
<td>ENY</td>
<td>1,254</td>
<td>40</td>
<td>236</td>
<td>966</td>
<td>-</td>
<td>-</td>
<td>76</td>
<td>2,572</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7,293</strong></td>
<td><strong>455</strong></td>
<td><strong>1,519</strong></td>
<td><strong>7,749</strong></td>
<td><strong>867</strong></td>
<td><strong>685</strong></td>
<td><strong>87</strong></td>
<td><strong>18,655</strong></td>
</tr>
</tbody>
</table>

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

Research Center

<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>2,101</td>
<td>150</td>
<td>150</td>
<td>690</td>
<td>-</td>
<td>-</td>
<td>13</td>
<td>3,104</td>
</tr>
<tr>
<td>CCR</td>
<td>90</td>
<td>-</td>
<td>-</td>
<td>507</td>
<td>839</td>
<td>225</td>
<td>-</td>
<td>1,661</td>
</tr>
<tr>
<td>CDE</td>
<td>1,129</td>
<td>-</td>
<td>5</td>
<td>992</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>2,137</td>
</tr>
<tr>
<td>COA*</td>
<td>385</td>
<td>275</td>
<td>460</td>
<td>2,978</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,098</td>
</tr>
<tr>
<td>CSRA</td>
<td>532</td>
<td>-</td>
<td>187</td>
<td>628</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,347</td>
</tr>
<tr>
<td>CTISR</td>
<td>33</td>
<td>-</td>
<td>100</td>
<td>783</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>916</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,270</strong></td>
<td><strong>425</strong></td>
<td><strong>902</strong></td>
<td><strong>6,578</strong></td>
<td><strong>839</strong></td>
<td><strong>225</strong></td>
<td><strong>24</strong></td>
<td><strong>13,263</strong></td>
</tr>
</tbody>
</table>

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

*1.3M of STAT COE funding is captured under COA.