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 American Society of Mechanical Engineers.

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, 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, 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.

Ruggles-Wrenn, Marina B., Professor of Aerospace Engineering, Department of Aeronautics and Astronautics, Fellow of the American Society of Mechanical Engineers International.

Soni, Som R., Associate Professor of Systems Engineering, Department of Systems and Engineering Management, Fellow of the American Society for Composites, Associate Fellow of AIAA.

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, Air Force Institute of Technology, Fellow of the Institute of Industrial Engineers, Fellow of the American Society of Quality, Fellow of the Institute for Operations Research and Management Sciences.
2.3. RESEARCH AND TEACHING AWARDS

2.3.1. FACULTY

BADIRU, ADEDEJI B.


Blue Dart Award, Commander’s Academic Recognition, Air Education and Training Command, Maxwell Air Force Base, Montgomery, AL, May 22, 2009.

Outstanding Educator Award, Associated Societies Council (ASC) of Dayton, Ohio, 2009.

Wellington Award, Institute of Industrial Engineers, Engineering Economy Division, 2009.

DECKRO, RICHARD F.


2009 Clayton J. Thomas Award from the Military Operations Research Society at the 77th MORS Symposium, Jun 2009, for distinguished service over time to the profession of military operations research, enhancement of the image and substance of military operations research, sustained outstanding performance as a military operations research practitioner, and the extension of individual knowledge and talents to others in the profession.


HALL, SHANE N.

Excellence in Teaching Award, Southwestern Ohio Council for Higher Education (SOCHE), 2009.

HOLT, DANIEL T.


HOPKINSON, KENNETH M.

Air Force Institute of Technology Civilian of the Quarter, Category III, 2nd Quarter 2009.

Air Force Institute of Technology EN Civilian of the Quarter, Category III, 4th Quarter 2008.

Air Force Institute of Technology EN Junior Civilian Scientist of the Year 2009.

KIM, YONG C.

MULLINS, BARRY E.


AFIT Instructor of the Quarter, Winter Quarter 2009, 16 July 2009.

Professor Ezra Kotcher Award, awarded by AFIT Board of Visitors, 23 April 2009.

AFIT Civilian of the Quarter-Category III, First Quarter 2009, 23 April 2009.

Dr. Leslie M. Norton Teaching Excellence Award for CY2008, awarded by AFIT Student Association, 26 March 2009.


OGDEN, JEFFREY A.,

2008-2009 – Instructor of the Year Award from Ft. Dix, New Jersy, Air Mobility master’s program students.


RAQUET, JOHN F.,

Selected to be Fulbright Scholar to Tampere University of Technology, Tampere, Finland.

SCHMIDT, JASON D.


THOMAS, RYAN W., Maj

Air Force Institute of Technology Mid-career Military Engineer of the Year, 2009.
2.3.2. STUDENTS

BELL, LATOSHA D.
American Nuclear Society Student Achievement Award, June 2009.

BODE, TIM
2009 Bryce Poe II Award (AF Historical Foundation).

CALLWAY, D. WALKER

COLEMAN, NICHOLAS R.

DIAMOND, THEODORE T.
2009 Air Force Chief Scientist's Award in Systems Engineering.

FERKO, JOHN
2009 Bryce Poe II Award (AF Historical Foundation).

GALLAGHER, DANIEL M.
“Electronic Nose’ Could Eliminate Terrorist’s IED Advantage,” Air University Blue Dart Award for Thesis Research Article, Top 25 Student Paper Award, 2009.

GREEN, NICHOLAS S.
Melvin E. Gross Award, March 2009.

GUNN, LARRY
2009 Bryce Poe II Award (AF Historical Foundation).

HEIMAN, THEODORE K.
2009 Jerome G. Peppers, Jr. Outstanding Student Award, International Society of Logistics (SOLE), March 2009, for his academic record and contributions to the field of logistics. Thesis: “Simulation Modeling of the C-5 Galaxy High Velocity Regionalized Isochronal (HVRISO) Inspection Concept.”

HOLZMANN, TIMOTHY W.
2009 Dean’s Award, March 2009, for the most exceptional masters thesis by a graduating student in the Department of Operatational Sciences. Thesis: “Probabilistic Estimation of Rare Random Collisions in 3-Space.”
JOHNSON, ROBERT J.
2008 Geospatial Intelligence Award for Academic Research from the United States Geospatial Intelligence Foundation (USGIF), based on the exceptional work from his masters thesis "Improved Feature Extraction, Feature Selection, and Identification Techniques That Create a Fast Unsupervised Hyperspectral Target Detection Algorithm." Award presented at the 2008 GEOINT Symposium, October 2008.

KENNEDY, KEVIN T.

LANIER, CHRISTOPHER
2009 Jerome G. Peppers, Jr. Outstanding Student Award, International Society of Logistics (SOLE), June 2009, for his academic record and contributions to the field of logistics. Graduate Research Project: “Supply Chain Synchronization: Improving Distribution Velocity to the Theatre.”

Melvin E. Gross Award, June 2009, for exceptional achievement, high qualities of character, and leadership.

LIPINA, ANDREW L.
2009 Military Operations Research Society (MORS) Award, June 2009, for the graduate research project judged to demonstrate the best application of operations research methodology or theory development to a military problem. Graduate Research Project: “Identifying Critical Factors Affecting Combat Mission Ready Status Among USAF Europe’s Aircrew.”

MALDONADO, FERDINAND

MATTEI, DANIEL I.
ATI Association Outstanding Student Award, March 2009.

McGARY, JOSHUA D.
2009 Dean’s Award, March 2009, for the most exceptional masters thesis by a graduating student in the Department of Engineering Physics. Thesis: “Electrostatic Discharge Properties of Irradiated Nanocomposites.”

MOLINA, CARLOS A.

NANCE, ROBERT L.
ROCHROHR, RANDALL L.
American Nuclear Society Student Achievement Award, March 2009.

ROGERS, MARSHALL

RUTHERFORD, ADAM
2009 Air Force Chief Scientist's Award in Systems Engineering.

SCHMITT, DANIEL T.
2009 Commandant's Award, March 2009, for the most exceptional masters thesis by a graduating student. Thesis: "Automated Knowledge Generation with Persistent Video Surveillance."

SCHRADER, KARL R.
Best Presentation in Computer Sciences, Fourth Annual Dayton Engineering Sciences Symposium, Wright State University.
Tau Beta Pi Thesis Award, “An FPGA-Based System for Detecting and Tracking Contraband Digital Information Transmitted Via Peer-to-Peer Protocols.”
Cyberspace Research Excellence Award, “An FPGA-Based System for Detecting and Tracking Contraband Digital Information Transmitted Via Peer-to-Peer Protocols.”

SHILLAND, GLEN R.

SMITH, AUSTIN
2009 Dean’s Award, March 2009, for the most exceptional masters thesis by a graduating student in the Department of Aeronautics and Astronautics. Thesis: "UAS Collision Avoidance Algorithm that Minimizes the Impact on Route Surveillance."

TAYLOR, BRETT
2009 Air Force Chief Scientist's Award in Systems Engineering.

VAN DEN TOP, TRICIA A.

WELLBAUM, CHRISTOPHER
2009 Best Student Presentation, 5th Annual Dayton Engineering Sciences Symposium.
3.4. OUTSIDE 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 outside funding for FY09, and Figure 3.2 summarizes the past ten fiscal years of outside sponsored funding.

Table 3.4  FY09 External Funding & Research Expenditures to Academic Departments & Research Centers by Type ($ 1,000's)

<table>
<thead>
<tr>
<th>Department</th>
<th>Newly Awarded Research Projects</th>
<th>Newly Awarded Education Projects</th>
<th>Total FY09 Newly Awarded Projects</th>
<th>Total FY09 Research Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics &amp; Statistics (ENC)</td>
<td># $k</td>
<td># $k</td>
<td># $k</td>
<td>$k</td>
</tr>
<tr>
<td>Electrical &amp; Computer Eng (ENG)</td>
<td>6 217</td>
<td>1 374</td>
<td>6 217</td>
<td>265</td>
</tr>
<tr>
<td>Engineering Physics (ENP)</td>
<td>67 4,650</td>
<td>8 365</td>
<td>43 4,407</td>
<td>7,062</td>
</tr>
<tr>
<td>Research &amp; Sponsored Programs (ENR)</td>
<td>1 17</td>
<td>1 27</td>
<td>2 44</td>
<td>38</td>
</tr>
<tr>
<td>Operational Sciences (ENS)</td>
<td>20 2,364</td>
<td>1 20</td>
<td>21 2,384</td>
<td>3,745</td>
</tr>
<tr>
<td>Systems and Eng Management (ENV)</td>
<td>15 1,088</td>
<td>1 60</td>
<td>16 1,148</td>
<td>1,659</td>
</tr>
<tr>
<td>Aeronautical &amp; Astronautical Eng (ENY)</td>
<td>40 1,290</td>
<td>-</td>
<td>40 1,290</td>
<td>5,227</td>
</tr>
<tr>
<td>TOTAL</td>
<td>184 13,668</td>
<td>12 846</td>
<td>196 14,514</td>
<td>27,323</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Center</th>
<th>Newly Awarded Research Projects</th>
<th>Newly Awarded Education Projects</th>
<th>Total FY09 Newly Awarded Projects</th>
<th>Total FY09 Research Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Navigation Technology (ANT)</td>
<td>14 790</td>
<td>-</td>
<td>14 790</td>
<td>1,524</td>
</tr>
<tr>
<td>Center for Directed Energy (CDE)</td>
<td>12 1,500</td>
<td>4 143</td>
<td>16 1,643</td>
<td>1,800</td>
</tr>
<tr>
<td>Center for Cyberspace Research (CCR)</td>
<td>15 2,341</td>
<td>1 374</td>
<td>16 2,715</td>
<td>3,364</td>
</tr>
<tr>
<td>Center for MASINT Studies and Research (CMSR)</td>
<td>10 1,575</td>
<td>-</td>
<td>10 1,575</td>
<td>1,811</td>
</tr>
<tr>
<td>Center for Operational Analysis (COA)</td>
<td>22 2,380</td>
<td>1 20</td>
<td>23 2,400</td>
<td>3,668</td>
</tr>
<tr>
<td>Center for Systems Engineering (CSE)</td>
<td>7 291</td>
<td>1 60</td>
<td>8 351</td>
<td>560</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80 8,877</td>
<td>7 597</td>
<td>87 9,474</td>
<td>12,727</td>
</tr>
</tbody>
</table>

Notes: AFIT reports research expenditures annually via the ASEE and NSF surveys. The numbers may differ slightly due to differences in definitions. Institutional cost matching is included. All Center funds are also included in departmental funding.

Figure 3.2: New Award History FY00-FY09
Figure 3.3 New FY09 Awards by Sponsor

Table 3.5 New FY09 Awards to Academic Departments & Research Centers by Sponsor

<table>
<thead>
<tr>
<th>Dept.</th>
<th>AFRL</th>
<th>Other USAF</th>
<th>Other DoD</th>
<th>NSA</th>
<th>NSF</th>
<th>Other Federal</th>
<th>Non-Federal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC</td>
<td>197k</td>
<td>20k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>217k</td>
</tr>
<tr>
<td>ENG</td>
<td>2,054k</td>
<td>402k</td>
<td>562k</td>
<td>1,796k</td>
<td>100k</td>
<td>-</td>
<td>-</td>
<td>5,024k</td>
</tr>
<tr>
<td>ENP</td>
<td>498k</td>
<td>1,513k</td>
<td>2,240k</td>
<td>-</td>
<td>156k</td>
<td>-</td>
<td>-</td>
<td>4,407k</td>
</tr>
<tr>
<td>ENR</td>
<td>17k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>27k</td>
<td>-</td>
<td>-</td>
<td>44k</td>
</tr>
<tr>
<td>ENS</td>
<td>175k</td>
<td>765k</td>
<td>1,400k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>44k</td>
<td>2,384k</td>
</tr>
<tr>
<td>ENV</td>
<td>824k</td>
<td>185k</td>
<td>129k</td>
<td>10k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,148k</td>
</tr>
<tr>
<td>ENY</td>
<td>926k</td>
<td>186k</td>
<td>158k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20k</td>
<td>1,290k</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,691k</td>
<td>3,070k</td>
<td>4,490k</td>
<td>1,806k</td>
<td>127k</td>
<td>156k</td>
<td>174k</td>
<td>14,514k</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Center</th>
<th>AFRL</th>
<th>Other USAF</th>
<th>Other DoD</th>
<th>NSA</th>
<th>NSF</th>
<th>Other Federal</th>
<th>Non-Federal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT</td>
<td>350k</td>
<td>210k</td>
<td>130k</td>
<td>-</td>
<td>-</td>
<td>100k</td>
<td>-</td>
<td>790k</td>
</tr>
<tr>
<td>CCR</td>
<td>792k</td>
<td>-</td>
<td>1,806k</td>
<td>100k</td>
<td>-</td>
<td>-</td>
<td>2,715k</td>
<td></td>
</tr>
<tr>
<td>CDE</td>
<td>359k</td>
<td>-</td>
<td>1,284k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,643k</td>
<td></td>
</tr>
<tr>
<td>CMSR</td>
<td>-</td>
<td>1,213k</td>
<td>362k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,575k</td>
<td></td>
</tr>
<tr>
<td>COA</td>
<td>207k</td>
<td>584k</td>
<td>1,565k</td>
<td>-</td>
<td>-</td>
<td>44k</td>
<td>2,400k</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>50k</td>
<td>185k</td>
<td>96k</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20k</td>
<td>351k</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,758k</td>
<td>2,209k</td>
<td>3,437k</td>
<td>1,806k</td>
<td>100k</td>
<td>-</td>
<td>164k</td>
<td>9,474k</td>
</tr>
</tbody>
</table>

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