

## MINUTES

### ADMINISTRATIVE UNIT OF THE SOUTHEASTERN SECTION AMERICAN SOCIETY FOR ENGINEERING EDUCATION April 5, 1993

The annual business meeting of the Administrative Unit of the Southeastern Section of the American Society for Engineering Education was held after lunch on April 7, 1993 in Centennial C of the Vanderbilt Holiday Inn Motel in Nashville, Tennessee. In attendance were:

Donald L. Cole	University of Louisville
R. L. Lott, Jr.	Vanderbilt University
John T. Mason, III	Tennessee Technological University
Kenneth H. Murray	NC A&T State University
John Rupf	Southern Tech
E. J. White	Vanderbilt University


The meeting was called to order by the Chairman, Donald Cole, at 12:40 p.m. The minutes of the 1992 meeting were read by the Chairman in the absence of the Secretary, and approved.

Discussion concerning the agenda for the 1994 meeting resulted in general agreement that a Roundtable Discussion is of interest to attendees of the Administrative Unit Session. There was discussion about the lack of participation in the Administrative Unit's sessions each year.

Donald L. Cole was elected secretary for 1993-94, completing the following offices in the Unit:

Chairman	John T. Mason III
Vice Chairman	Celestine A. Ntuen
Secretary	Donald L. Cole

The meeting adjourned at 1:15 p.m.

  
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Donald L. Cole  
(for Celestine A. Ntuen, Secretary)

## MINUTES

ADMINISTRATIVE UNIT ROUNDTABLE DISCUSSION  
SOUTHEASTERN SECTION  
AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
April 5, 1993

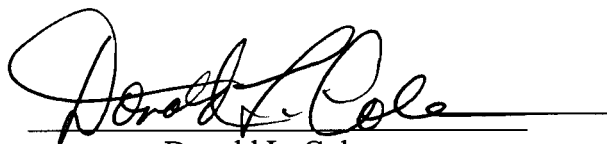
The Administrative Unit Session of the Southeastern Section of the American Society for Engineering Education was held at 3:15 p.m. on April 5, 1993 in the Bartlett Room of the Vanderbilt Holiday Inn in Nashville, Tennessee.

The attendees were:

William Beard	Western Kentucky University	205-745-5844
Lisa Bogarty	Pellissippi State University	615-694-6482
Donald L. Cole	University of Louisville	502-588-7599
Richard Gould	Middle Tennessee State University	615-898-2776
R. L. Lott, Jr.	Vanderbilt University	615-322-2891
John T. Mason, III	Tennessee Technological University	615-372-3172
Clark Midkiff	University of Alabama	205-348-1645
Kenneth H. Murray	North Carolina A&T State University	919-334-7737
Abe Pallus	Columbia State Community College	615-388-0120
John Rupf	Southern Tech	404-528-7246
Farid Tranjan	UNC-Charlotte	704-547-4149
E. J. White	Vanderbilt University	615-322-0719

John T. Mason III, Vice Chairman, moderated the Roundtable Discussion that centered on Faculty Development, Student Retention, Distance Education, and Multi-media Instruction.

The session concluded at 4:30 p.m.



Donald L. Cole  
(for Celestine A. Ntuen, Secretary)

# Southeastern Regional Conference of the American Society for Engineering Education

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*DISTANCE LEARNING*

*Now and in the 21st century*

**April 4 – 6, 1993 • Nashville, Tennessee**

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Conference Co-Sponsored by ASEE  
and Vanderbilt University



# 1993 ASEE Southeastern Regional Conference

## General Conference Information

Section President:	Robert Batson, University of Alabama
Technical Program Chair:	Dennis J. Fallon, The Citadel
Local Arrangements:	Edward J. White, Vanderbilt University Peter Hoadley, Vanderbilt University Robert Lott, Vanderbilt University

### Conference Registration

Conference registration times and locations are listed in the schedule. The registration fee for participants includes two breakfasts, two lunches, the opening reception and the awards banquet. The opening reception and pre-banquet reception are open to all attendees.

Please mail your conference registration form with payment to: School of Engineering, Vanderbilt University, Box 1826, Station B, Nashville, TN 37235; or fax your form with credit card number to: (615) 343-8006.

### Hotel Information

The Holiday Inn Vanderbilt will be the site of this year's conference. For room reservations, call the Holiday Inn Vanderbilt at (615) 327-4707 or fax (615) 327-8034. Please make your reservations under the Vanderbilt University group block. Room rates will be \$58.00 for a single room, \$64.00 for a double room, plus taxes. Room reservations should be made by March 6, 1993 to receive the special room rate and to assure room availability.

### Transportation and Directions

The Holiday Inn Vanderbilt is located on West End Avenue across from the Parthenon and near Vanderbilt Stadium. West End Avenue and the Holiday Inn Vanderbilt are easily accessible from I-40 by taking the Broadway exit (Broadway will become West End Avenue). Follow the directional signs for Vanderbilt University. The Holiday Inn Vanderbilt will be located on your left approximately 1 1/2 miles from downtown.

Nashville International Airport is served by 11 airlines including 4 commuter carriers. Transportation from the airport is available by Grayline Downtown Airport Express Shuttle. Shuttle buses to the Holiday Inn Vanderbilt run every 30 minutes. The cost is \$8.00 one way and \$14.00 round trip. Taxi rental from the airport to the Vanderbilt area will cost from \$16.00 to \$20.00 one way.

### Spouse Program

Monday's tour will be a trip to Belle Meade Plantation and to Cheekwood Fine Arts Museum and Botanical Gardens. Transportation and lunch are included. Tuesday's program will be a historical tour of Vanderbilt Campus. Lunch will also be included. Registration for both days will be \$42.00, for Monday only \$35 and for Tuesday only \$12. Please register in advance, if possible.

### Early Arrival Information and "On Your Own" Activities

Nashville has a number of other exciting and interesting activities available for those visiting the city. Besides Belle Meade Plantation and Cheekwood Museum and Botanical Gardens (both part of the Spouse Program), there is The Hermitage, Home of President Andrew Jackson. The Parthenon, located in Centennial Park directly across from the Holiday Inn Vanderbilt, is the only full-size replica of the ancient Greek temple in the world. Other Nashville attractions include tours of the Ryman Auditorium (long-time home of the Grand Ole Opry) and the Country Music Hall of Fame. Nashville is also host to numerous night-time music listening clubs, where you can hear everything from bluegrass, to jazz, to rock and roll.

For early arrivals, packets of information are available about activities in Nashville. Included is information on how to obtain Grand Ole Opry tickets (Opry shows are on Fridays and Saturdays only), or tickets for a cruise on the General Jackson Riverboat. Please check the box on your registration form to indicate you would like a packet mailed to you. Information will also be available at on-site registration.

1993 ASEE Southeastern Regional Conference  
**Conference Schedule**

**Sunday, April 4**

TIME

1:00 - 6:00 PM	<b>Registration</b> — <i>Lobby</i>
2:00 - 4:00 PM	<b>Learning Styles/Teaching Techniques Workshop</b> — <i>Training Room</i> (Workshop description in the back of the program)
4:00 - 6:00 PM	<b>Section Executive Board Meeting</b> — <i>Coaches Corner</i>
7:00 PM	<b>Reception</b> — <i>Centennial A and B</i>

**Monday, April 5**

7:00 - 9:00 AM	<b>Registration</b> — <i>Lobby</i>
7:30 - 9:00 AM	<b>General Breakfast</b> — <i>Lounge</i> <ul style="list-style-type: none"><li>• Campus Representatives Meeting — <i>Centennial A</i></li><li>• New Engineering Educators Meeting — <i>Centennial B</i></li><li>• Session Moderators Meeting — <i>Centennial C</i></li></ul>
9:00 - 10:15 AM	<b>General Session</b> — <i>Centennial Room</i> <ul style="list-style-type: none"><li>• Welcome to Vanderbilt University</li><li>• Section President's Welcome -Dr. Robert Batson, University of Alabama</li><li>• Announcements</li><li>• Keynote Address -Chancellor Joe B. Wyatt, Vanderbilt University</li></ul>
10:15 - 10:45 AM	<b>Refreshment Break</b> — <i>Centennial Foyer</i>
10:45- NOON	<b>Technical Sessions</b> (see Technical Session Information for papers and authors) <ul style="list-style-type: none"><li><b><u>Industrial Interest</u></b> — <i>Bartlett Room</i> Moderator: Robert Batson University of Alabama</li><li><b><u>Instructional Unit Session I</u></b> — <i>Parthenon Room</i> Moderator: D. J. Fallon The Citadel</li><li><b><u>Civil Engineering Session I</u></b> — <i>Coaches Corner</i> Moderator: Russell H. Stout, Jr. The Citadel</li><li><b><u>Engineering Technology Session I</u></b> — <i>Training Room</i> Moderator: Rhonda Hockelberg Alabama Agricultural and Mechanical University</li></ul>

- NOON - 1:30 PM**      **Unit Luncheons and Business Meetings** — *Lounge*  
(Separate Rooms)
- Instructional Unit — *Centennial A*  
Presentation of the Tom C. Evans Award Winning Paper  
and Business meeting
  - Research Unit — *Centennial B*
  - Administrative Unit — *Centennial C*
- 1:30 - 2:45 PM**      **Technical Sessions** (see Technical Session Information for papers and authors)
- Industrial Engineering Session**      — *Bartlett Room*  
Moderator: Robert Batson  
University of Alabama
- Mechanical Engineering Session I**      — *Parthenon Room*  
Moderator: B. K. Hodge  
Mississippi State University
- Electrical Engineering Session**      — *Training Room*  
Moderator: Shelton Houston  
University of Southern Mississippi
- Civil Engineering Session II**      — *Coaches Corner*  
Moderator: John A. Murden  
The Citadel
- 2:45 - 3:15 PM**      **Refreshment Break** — *Centennial A*
- 3:15 - 4:30 PM**      **Technical Sessions** (see Technical Session Information for papers and authors)
- Administrative Unit Session**      — *Bartlett Room*  
Moderator: John T Mason, Jr.  
Tennessee Technological University
- Instructional Unit Session II**      — *Parthenon Room*  
Moderator: M. R. Chowdhury  
Army Waterways Experimental Station
- Civil Engineering Session III**      — *Coaches Corner*  
Moderator: Curtis Young
- Engineering Graphics Session**      — *Training Room*  
Moderator: Jimmy Dean Hahs  
East Tennessee State
- 6:00 - 7:00 PM**      **Reception** — *Centennial Room*
- 7:00 - 9:00 PM**      **Awards Banquet** — *Centennial Room*





# 1993 Southeastern Regional Conference

## Technical Session Information

### Industrial Interest

Monday, 10:45 - NOON

— Bartlett Room

Moderator: Robert Batson  
University of Alabama

Distance Education Need Not Be Impersonal

Anita L. Callahan, Lee A. Weaver, Paul E. Givens and Andrew J. Barrett  
University of South Florida

Role of SME's Manufacturing Engineering Education Foundation in Enhancing Lab Resources—An Experience  
S. Kant Vajpayee

The University of Southern Mississippi

Partnerships with Industry, Distance Education, and Paradigm Changes

Harold W. Schmitt

The University of Tennessee

### Instructional Unit Session I

Monday, 10:45 - NOON

— Parthenon Room

Moderator: D. J. Fallon  
The Citadel

Breaking the Mathematics Monopoly

Louis E. Fay  
Georgia Military College

Three Caveats for Users of Linear Regression Analysis

Curtis J. Young and Joann Lee  
University of North Carolina at Charlotte

A 3-D Perspective to Selected Eigenvalue/Eigenvector Problems

Chase Laurendine Jr. and Malcolm A. Cutchins  
Auburn University

Teaching an Old Dog a New Trick

Cecil Ramage and Edmund Tsang  
University of South Alabama

### Civil Engineering Session I

Monday, 10:45 - NOON

— Coaches Corner

Moderator: Russell H. Stout, Jr.  
The Citadel

Computer Simulations as a Supplement to Civil Engineering Laboratory Courses

John A. Murden  
The Citadel

Integrating Applications Software into the Civil Engineering Technology Curriculum

Andrew C. Kellie and William Whitaker  
Murray State University

Changing Scales in the Strength of Materials Laboratory

Timothy A. Philpot  
Murray State University

An Efficient and Effective way to Teach Failure in Existing Undergraduate Civil Engineering Programs

Oswald Rendon-Herrero  
Mississippi State University



**Engineering Technology Session I**

Monday, 10:45 - NOON

— Training Room

Moderator: Rhonda Hockelberg  
Alabama Agricultural and Mechanical University

A Teachers Perspective of Satellite Transmitted Courses in Engineering Technology  
John M. Jeffords and F. M. Williams  
Old Dominion University

In-Built Mechanisms to Enhance Successful Outcomes in the Educational Process of Engineering Technologists  
Stanley N. Ihekweazu  
South Carolina State University

The Use of Small Scale Rotative Machinery in the Laboratory Environment for Teaching Single Plane Balancing for Large Centrifugal Machinery  
Helmuth E. Worbs  
University of Central Florida

A Guide to Enhance Televideo Distance Learning  
Robert E. Magowan  
Memphis State University

**Industrial Engineering Session**

Monday, 1:30 - 2:45 PM

— Bartlett Room

Moderator: Robert Batson  
University of Alabama

Distance Education as a Strategic System in the University  
Harold W. Schmitt and C. Harold Aikens  
The University of Tennessee

Simulating Competition Among Remote Sites  
Greg Deal and Anita L. Callahan  
University of South Florida

Academic Issues in Distance Learning: Flexibility vs. Standards  
Jerry D. Westbrook  
University of Alabama in Huntsville

Another Assistant?  
James Marr  
Alabama A & M

**Mechanical Engineering Session I**

Monday, 1:30 - 2:45 PM

— Parthenon Room

Moderator: B. K. Hodge  
Mississippi State University

The First Study of United States Engineering Education: The Mann Study  
William Beard  
Western Kentucky University

Trends in Civil Engineering and Mechanical Engineering at Tennessee State University  
Chinyere Onwubiko  
Tennessee State University

A Century of Evolution in a Mechanical Engineering Program  
B. K. Hodge and W. G. Steele  
Mississippi State University

Experiences with a Video-taped Off-Campus Mechanical Engineering Graduate Program  
W. G. Steele, R. P. Taylor, B. K. Hodge and E. W. Jones  
Mississippi State University

**Electrical Engineering Session**

Monday, 1:30 - 2:45 PM

— Training Room

Moderator: Shelton Houston  
University of Southern Mississippi

Expert Systems in Distance Education  
Asad Yousuf  
Savannah State College

Control System Experimentation Under Tight-Budget Restrictions  
Robert L. Drake  
The University of Tennessee

A Pure Computer Engineering Degree Curriculum  
Marvin C. Schiffman  
The University of Southern Mississippi

Computer Networks In An Instructional Setting  
Shelton L. Houston  
University of Southern Mississippi

Microprocessor versus Microcontroller Selection Criteria and Application Examples  
Gary H. Johnsey  
University of Southern Mississippi

**Civil Engineering Session II**

**Monday, 1:30 - 2:45 PM**

— *Coaches Corner*

Moderator: John A. Murden  
The Citadel

University Interdisciplinary Environmental Studies: No Risk Value added Education  
Steven S. Schneiderman  
Murray State University

Adding Computer Technology to the Basic Surveying Course  
John H. Page  
Virginia Military Institute

Are You an L, X, Y or Z Engineering Educator?  
Dennis J. Fallon and Kenneth P. Brannan  
The Citadel

Using FEA in the Design and Analysis of a Miniature Micromachined Accelerometer  
K. M. Walsh, J. P. Mohsen and M. Miracle  
University of Louisville

**Administrative Unit Session**

**Monday, 3:15 - 4:30 PM**

— *Bartlett Room*

Moderator: John T Mason, Jr.  
Tennessee Technological University

Roundtable Discussion of Topics to include:  
Faculty Development  
Retention- Reasons and Actions  
Distance Education  
Multi-media Instruction

**Instructional Unit Session II**

**Monday, 3:15 - 4:30 PM**

— *Parthenon Room*

Moderator: M. R. Chowdhury  
Army Waterways Experimental Station

Supplementing Teaching and Homework with Video Tapes and Audio Cassettes  
Marvin C. Schiffman  
The University of Southern Mississippi

The Most Effective Methods of Teaching Computer Simulation Modeling  
John Myers  
University of Southern Mississippi

Assessment: How to Make the Lemon into Lemonade  
John H. Page  
Virginia Military Institute

Are Current Student Evaluation Techniques an Accurate Assessment of Effective Teaching  
John Myers  
University of Southern Mississippi

An Oral Communication Component in the Engineering Design Process  
Lawrence J. Dunlop and Jack A. Stinson  
The Citadel

**Civil Engineering Session III**

**Monday, 3:15 - 4:30 PM**

— *Coaches Corner*

Moderator: Curtis Young

Experiences in a Capstone Course with Civil Engineering and Architectural Engineering Students

Kenneth H. Murray

North Carolina Agricultural and Technical State University

Bringing Practicing Engineers and Engineering Practice to the Classroom

W. Grigg Mullen

Virginia Military Institute

The Legacy of Benjamin Banneker: A Professional Surveying Track Curriculum at Florida A&M University

Jeffrey G. Carlen

Florida Agricultural and Mechanical University

Numerical Methods for Civil Engineers

Peter W. Hoadley

Virginia Military Institute

**Engineering Graphics Session**

**Monday, 3:15 - 4:30 PM**

— *Training Room*

Moderator: Jimmy Dean Hahs

East Tennessee State

A Comparison of Teaching Computer-aided Drafting and Traditional Drafting Sequence  
and in Parallel with Respect to Comprehension and Proficiency

Frank S. Irlinger

Mechanical & Industrial Engineering Technologies

A Computer Tool for Helping Students Develop 3D Thinking Capabilities

Fang Zhao

Florida International University

Modern Engineering Graphics at Tennessee Tech

Larry Goolsby

Tennessee Technological University

**Centennial Plenary Session**

**Tuesday, 9:00 - 10:15 PM**

— *Centennial Room*

History of the Southeastern Section of the ASEE

Jack B. Evett

University of North Carolina at Charlotte

Outstanding Engineering Educators in the Southeast: A Salute to Five Who Made a Difference

Robert G. Batson

University of Alabama

**Instructional Unit Session III**

**Tuesday, 10:45 - NOON**

— *Parthenon Room*

Moderator: J. P. Moshen

University of Louisville

Distance Education: Learning by Adult Students in the Work Place

Harold W. Schmitt

The University of Tennessee

Challenging the Brightest Freshman in the Introduction to Engineering Courses

Daniel D. Ludwig

Virginia Polytechnical Institute and State University

Education by the Triangle Model

Stanley N. Ihekweazu

South Carolina State University

An Instructional Strategy to Integrate Topics within a Multi-Disciplinary Course  
Susan L. Coleman and Ellen M. Tomchin  
Virginia Polytechnic Institute and State University

**Engineering Technology Session II**

**Tuesday, 10:45 - NOON**

— *Training Room*

Moderator: Rhonda Hockelberg  
Alabama Agricultural and Mechanical University

Development of a Unique Multi-Discipline PC-based Data Acquisition, Analysis  
and Process Control Mobile Laboratory System  
Ambrose Barry  
University of North Carolina at Charlotte

An Electronic Engineering Technology Degree with an Emphasis in Airway Science  
Marvin C. Schiffman  
The University of Southern Mississippi

The Use of Distance Learning Technology to Expand Undergraduate Programs in Engineering  
Randy L. Perry and Ed Wheeler  
University of Tennessee at Martin

Distance Learning: Engineering Technology for West Tennessee  
Susan Simon  
Memphis State University

**Instructional Unit Session IV**

**Tuesday, 10:45 - NOON**

— *Bartlett Room*

Moderator: James K. Nelson  
Clemson University

A Panel discussion on the Advantages and Disadvantages of Long Distances  
Educational from Several Perspectives

Panel: James K. Nelson- Clemson University  
Ben Blanchard- Virginia Polytechnical Institute and State University

**Combined Electrical, Mechanical, and Civil Session** **Tuesday, 10:45 - NOON**

— *Coaches Corner*

Moderator: Kenneth Brannan  
The Citadel

Integrating Artificial Intelligence In An Engineering Computer Science Curriculum  
Adel S. Elmaghraby, Khaled A. Kamel and Arthur M. Riehl  
University of Louisville

Team Project of Computer Application of Multi-mass Absorbers Effective  
in wide Frequency Band in Advanced Vibrations Class  
George Przybyl-Einstein, Krzysztof Wernerowski, Ravikumar Subramanian,  
and Togarepi Chinoda  
Tennessee State University

Structures for the Twenty First Century  
Mostafiz R. Chowdhury  
Army Experimental Waterways Station

A Model Capstone Design and Manufacturing Course in Mechanical Engineering Curriculum  
Ahmad Smaili and Joseph Scardina  
Tennessee Technological University

Design of a Remotely Operated Cutting Tool: Students Perspective  
Emmanuel I. Agba and E. William Jones  
Mississippi State University

1993 ASEE Southeastern Regional Conference  
**Workshop Information**

**Learning Styles/Teaching Techniques Workshop**  
with Susan Simons, Memphis State University

Sunday, April 4, 1993

2:00 - 4:00 PM

Training Room • Holiday Inn Vanderbilt  
Registration Fee - \$25.00

**Learning Styles/Teaching Techniques —  
What are Some of the Theories of College Student Development**

Learning styles and teaching styles will be the primary emphasis of the workshop. The instrument utilized will be the Kolb Learning Style Inventory which will examine the individual learning style of the participants. By examining and understanding the difference of the individual learning styles within the group, the participants will have a greater understanding of the learners in their classrooms and could then resort to various methods of teaching to enhance the education of all. These methods may also be incorporated into other developmental models such as William Perry's theory of intellectual and ethical development and Lawrence Kohlberg's theory of moral development, which will also be discussed.

# 1993 ASEE Southeastern Regional Conference Registration Form

<input type="checkbox"/> Registration prior to March 6, 1993	Fee \$150.00
<input type="checkbox"/> Registration after March 6, 1993	\$175.00
<input type="checkbox"/> Learning Styles Workshop	\$25.00
<input type="checkbox"/> Additional Banquet Ticket	\$22.00
<input type="checkbox"/> Spouse Program	- Monday & Tuesday \$42.00
<input type="checkbox"/>	- Monday Only \$35.00
<input type="checkbox"/>	- Tuesday Only \$12.00

Total Enclosed: \$ \_\_\_\_\_

Last Name \_\_\_\_\_ First Name and Initial \_\_\_\_\_

Preferred Badge Name \_\_\_\_\_

Spouse or Guest's Name (if applicable) \_\_\_\_\_

Organization / Employer \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State and Zip \_\_\_\_\_

Check Enclosed

MasterCard

Visa

Please make checks payable to:

Credit Card Number \_\_\_\_\_

School of Engineering, Vanderbilt University

Expiration Date \_\_\_\_\_

Authorized Signature \_\_\_\_\_

— For early arrivals —

Please send me information about  
"on your own" activities in Nashville.

Please return this form with payment to : School of Engineering  
Vanderbilt University  
Box 1826, Station B  
Nashville, TN 37235  
or fax (615) 343-8006

If you have any questions concerning conference registration, please call Sally Davidson or Sharon Lowe at (615) 322-2762

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