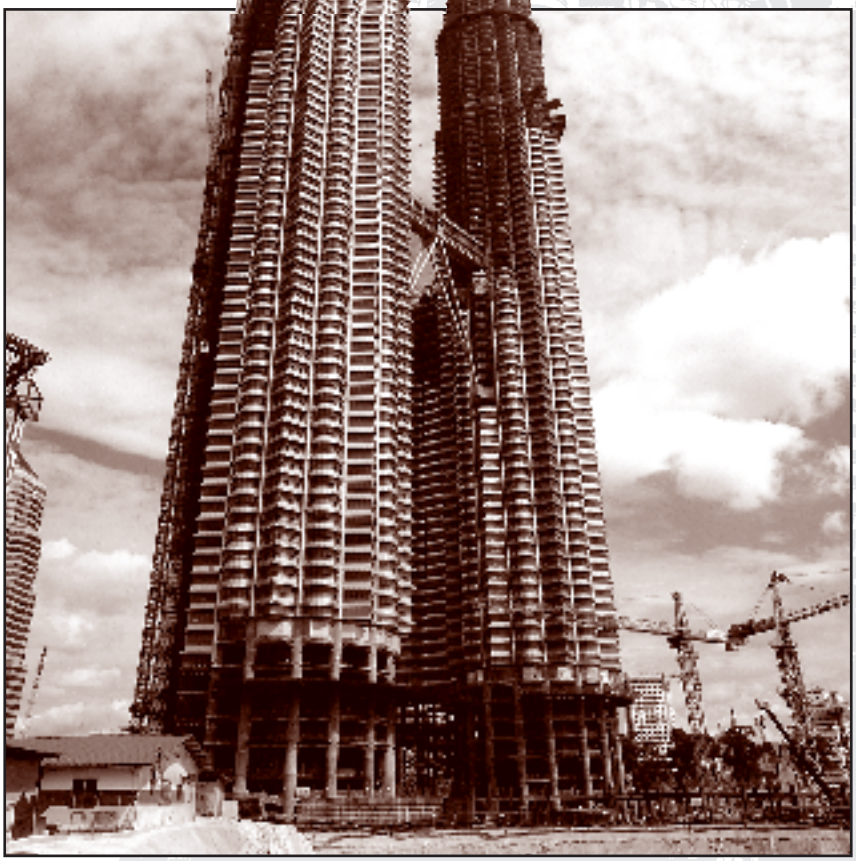
NC STATE UNIVERSITY



DEPARTMENT OF CIVIL, CONSTRUCTION, & ENVIRONMENTAL ENGINEERING

2003/2004 NEWSLETTER

IN THIS ISSUE

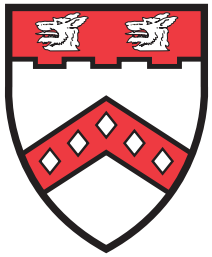
In This Issue

ABOUT THE COVER

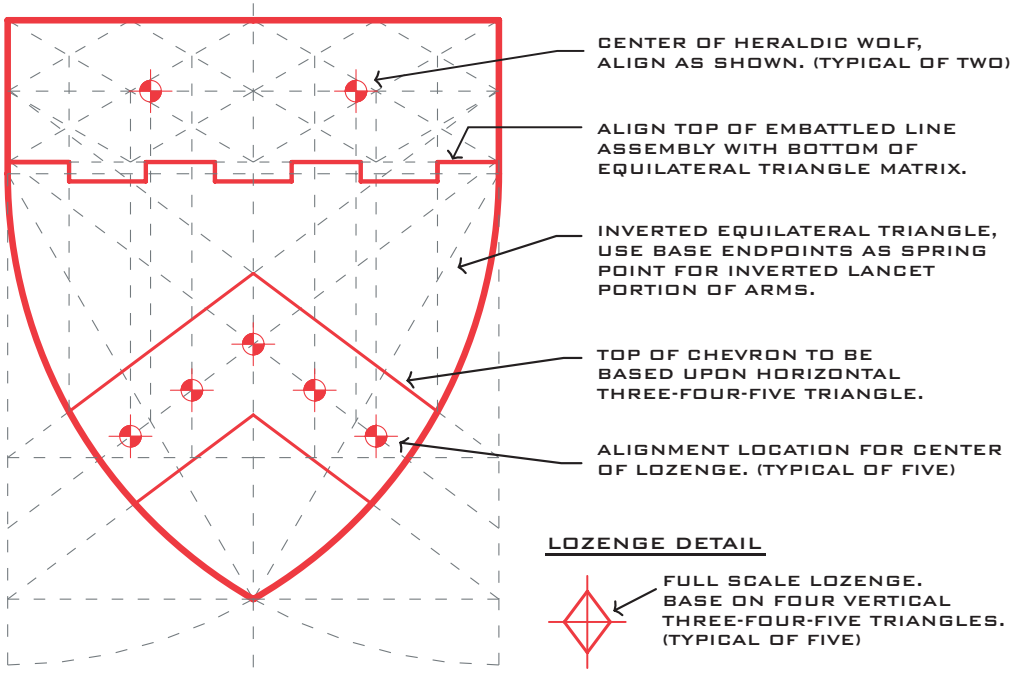
Acknowledged by the Council on Tall Buildings and Urban Habitat as the tallest buildings in the world, the Petronas Twin Towers in Kuala Lumpur are an icon of modern Malaysian architecture. As Chairman of the Board of J.A. Jones, Inc., Johnie Hooper Jones (BSCE '53) provided construction engineering leadership to this international project. The two towers were designed by Cesar Pelli & Associates in association with KLCC architects. This massive project, in which J.A. Jones, Inc. was responsible for the construction of one of the two towers, was completed in early 1997. We are proud to be able to claim Johnie Hooper Jones as an alumnus of the Department of Civil, Construction, and Environmental Engineering. Such achievements of international prominence like those of Mr. Jones illustrate our tradition of excellence in engineering education and the individual contributions of just a few of our many outstanding alumni. (Photo courtesy of J. A. Jones, Inc.)

Achievement of Arms

In the time-honored tradition of academic heraldry, an Achievement of Arms has been designed for the Department of Civil, Construction, and Environmental Engineering. The design faithfully adheres to the historic rules of heraldic design and employs the University's colors of red and white and the wolf mascot. The upper portion of the arms, called the chief, is red with two heraldic wolves. An embattled line describes the bottom of the chief. This is a design feature associated with fortress building, which was the cradle of the engineering profession. The remaining portion of the arms, called the field, is white and contains a red chevron. Within the chevron, which is a customary symbol for education, are five white diamond shapes called "lozenges." The lozenges appear in the coat of arms of Sir Walter Raleigh and represent constancy. In earlier times, there was no standard system for measuring length. Design techniques therefore were based upon trigonometric ratios and Euclidian geometry. The layout of this Achievement of Arms reflects that tradition.



Achievement of Arms
Department of Civil, Construction, and Environmental Engineering



Departmental Message

E. Downey Brill, Jr.

This newsletter is the first under our new name, Department of Civil, Construction, and Environmental Engineering, which was selected by the faculty to reflect better our extensive programs across these three areas.

I will be completing my third term as department head this year, and I have decided to return to the role of professor. The department recently began the search for the next head. Dean Masnari has formed an excellent search committee, which includes Roy Borden, Detlef Knappe, Mervyn Kowalsky, Margery Overton, and Nagui Rouphail, and I am sure they will do a superb job.

It has been a privilege to serve as head of this outstanding department. I would like to take this opportunity to thank all of the students, alumni and other friends of the department as well as the faculty and staff throughout the university who have made my time in this position so enjoyable. I sincerely appreciate all of the support provided to me and to the department over the last 16 years. Special thanks to:

- John Ely, Bill Bingham, and David Parish who have served as coordinator of advising for the Civil Engineering, the Construction Engineering and Management, and later the Environmental Engineering undergraduate programs. They have always done a superb job of watching over 450 to 600 students with care while maintaining appropriate expectations for our professional programs.

- Harvey Wahls and David Johnston who, as Directors of Graduate Programs and Associate Heads, brought about consistent growth in our graduate programs. This year we have roughly 220 students, an excellent group from around the world, with over 70 in the PhD program and roughly 125 on assistantships.

- John Fisher and Mort Barlaz who, as Associate Heads for Academic Programs, did an outstanding job of managing innumerable wide-ranging academic issues with creativity and energy. Mort is currently overseeing the development of our new environmental lab to be built in Broughton Hall in the wing next to Mann Hall.

- Paul Zia who conceived the Constructed Facilities Lab, David Johnston and others for the large NSF grant to equip the CFL, and Sami Rizkalla, the current director, and others who have built a world class research program in experimental structures, materials, and geotechnical engineering.

- The many alumni and friends who have provided their time and efforts in service to our academic programs and their financial support for scholarships and program enhancements. With 12 recent endowments totaling over $2 million, our total Departmental endowment now approaches $7 million.

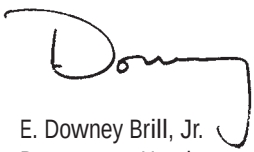
- The faculty who worked hard to build programs in important new areas, such as computer-aided engineering, and who worked hard to recruit outstanding junior faculty, including eight NSF CAREER or Presidential Fellow awardees now on our faculty.

- Velma Weeks, Eleanor Hart, Rebecca Benton Doyle, Vicki Walton, Charity Cartwright, Barbara Rowe, Annette Maynard and many others who ensured the smooth operation of the department. I wish there were space to list all of the others who have contributed in so many ways over the last 16 years.

Rooney Malcom is retiring this semester after 31 years on our faculty. He is remembered by thousands of students for the quality of his teaching as well as his concern for them personally. Several of them are now spearheading an effort to establish an endowment in his honor for use in the support of undergraduate teaching.

Finally, we all take great pride in the many accomplishments of our students, faculty and staff, and I hope you enjoy reading about some of their recent achievements in this newsletter.

Best Regards,



E. Downey Brill, Jr.
Department Head
Civil, Construction, and Environmental Engineering

Withers & Ravenel, Inc. Fund Mann Hall Lobby Donor Board

Withers & Ravenel, Inc., a 104 person civil engineering firm in Cary, provided the funds for an Endowment Donor Board for the lobby of Mann Hall. The Donor Board, which lists each of the Department's endowments, is made of quartersawn white oak and is designed in a Collegiate Gothic motif. Department Head Downey Brill stated, "Tony and Sam have been instrumental in our efforts to communicate the necessity of increasing the number of endowments. The Donor Board communicates this to all who enter Mann Hall and also gives students the opportunity to learn the names of individuals, construction companies, and consulting engineering firms that have established endowments to support the Department." Tony Withers, who has recently joined the NC State Engineering Foundation Board of Directors, notes: "Across the country, state funding of public universities continues to decrease. Endowments are key to making up the difference and keeping engineering programs competitive. There is a direct correlation between national ranking and endowment size. Sam and I were pleased to have had the opportunity to support our Department in this way."

Tony WIthers

Sam Ravenel

Donor Board in the lobby of Mann Hall lists endowments that support the Department of Civil, Construction, and Environmental Engineering at NC State.

Charles D. Lamb, P.E.

Richmond, Virginia
B.S. in Civil Engineering, 1976

- Registered professional engineer in 15 states
- Private pilot with Airline Transport Pilot rating and Flight Instructor certificate
- Active in US Coast Guard Auxiliary
- Certified Member of American Association of Airport Executives

Charlie Lamb is the President of Delta Airport Consultants, Inc., a 65 person consulting firm that specializes exclusively in airport planning and engineering. The firm provides services to airport clients across the nation. He and his wife Patricia have five children, including a daughter who graduated from NC State in 2003, and one grandchild.

Gifts to the College of Engineering

- The Delta Airport Consultants, Inc., Endowment Fund for the Department of Civil, Construction, and Environmental Engineering ($50,000)
- The Charles and Patricia Lamb Scholarship Endowment for the College of Engineering ($25,000)

Notable Quotation

"My success as an engineer is a direct result of the engineering education I received at NC State. As such, I have always felt a personal debt to State. It is a joy and a privilege to give back and help engineering students prepare for the future."

CE Prof's Hopes for Augusta Invite Perish

Dave Parish's dreams of an invitation to the 2004 Masters vaporized on the first tee at the first annual Department of Civil, Construction, and Environmental Engineering Golf Tournament held at Crooked Creek Golf Club in Fuquay-Varina. The May 20th 2003 event brought together alumni, friends, faculty, and staff of the Department, each giving their all in order to win the coveted Carl Spackler Cup. Parish, a former Army officer and now head of undergraduate advising, pulled his tee shot and things went downhill from there. "I don't know what happened," he exclaimed, "That eight iron was plenty of club to reach the green. I was only 450 yards away."

Sources informed CEN (Civil Engineering News) that Parish was overheard in the clubhouse attributing his poor swing to an injured Achilles heel he suffered at the hands of his caddy during a recent golf outing in Tibet. It was determined that the geotechnical engineer's illusions of golf grandeur were the result of exposure to soil he was testing that was found to contain seeds from an extremely toxic species of grass. Scientists from the Department of Horticulture at NC State found that the toxic turf was a genetic anomaly resulting from a cross between common fescue and Kentucky bluegrass #36.

Cinderella Story - Claiming that they need only an eight iron and a putter, this mighty foursome heads for the flower beds next to the clubhouse in order to get in some last minute practice swings before their run for the illustrious Carl Spackler Cup. Pictured left to right are: Joe Donaldson, Vince Rogers, Robert Foyle, and John Hanson.

CE Flotilla Torpedoes Competition - Scores Top 10 Finish

Anchors Away - Students from NC State's Department of Civil, Construction, and Environmental Engineering prepare to deploy their vessel at the 2003 National Concrete Canoe Competition in Philadelphia.

The 2003 National Concrete Canoe Competition, sponsored by ASCE, was held in Philadelphia, Pennsylvania last July and we are proud to report that NC State finished 10th in the Nation! Spectators quickly concluded that mental horsepower was the name of the game when the announcement came that NCSU had been awarded the medal for the lightest canoe. The Wolfpack Watersports winning design weighed in at slightly under 100 lbs. The second lightest weighed 125 lbs and the average canoe weighed 160 lbs. When asked by CEN (Civil Engineering News) how the Wolfpack team managed to accomplish such a challenging technological feat, CMDR* David Jones, a naval officer from the Philadelphia Naval Shipyard, responded "The students simply applied what they had learned in class and capitalized on NC State's expertise in lightweight concrete design." Consider this Armada of nautical prowess by students Daniel Anderson, Justin Struble, Laurissa Hoyle, Liza Runey, Julie Robinson, & Elizabeth Sall:

- **8th Place Men's Endurance Event** (Anderson & Struble)
- **6th Pace Women's Sprint Event** (Hoyle & Runey)
- **3rd Place Men's Sprint Event** (Anderson & Struble)
- **3rd Place Women's Endurance Event** (Hoyle & Robinson)
- **2nd Place Co-Ed Sprint Event** (Anderson, Runey, Sall, & Struble)

* for you non-Navy types "CMDR" stands for "Concrete Materials Design Researcher"

Jean Phillips Retires

Jean Phillips

After 26 years of service, Jean Phillips retired on March 1, 2003 as the Student Services Assistant in the Undergraduate Affairs Office for the Department of Civil, Construction, and Environmental Engineering. During her employment, Jean was an invaluable member of the staff and a vital resource to the faculty and countless undergraduate students. She received the College of Engineering's Award of Excellence in 2002 and served our Department, the College and the University well. We wish Jean a wonderful retirement!

Burlacu Joins Research Office

Bogdan Burlacu

Bogdan A. Burlacu joined the Department in the position of Research Associate and Coordinator. Bogdan completed the five-year Accelerated Masters program in Computer Engineering at NC State University in December of 2002. His educational background and interests include embedded systems, networking, programming, digital circuits design, microprocessor architecture, mechatronics, as well as operating systems. Prior to his arrival at NC State in January of 2000, Bogdan was a student at the Faculty of Electronics and Telecommunications within the Polytechnic University of Bucharest, Romania. Bogdan coordinates the department's information technology services as well as provides innovative hardware and software solutions for teaching and research facilities.

Howard Joins Graduate Office

Renee Howard

Renee Howard joined the Department in April 2002 as the Secretary for the Graduate Program Office. She comes to Raleigh from Oklahoma City where she worked with the Oklahoma Department of Agriculture for many years. Renee provides support to both current and prospective graduate students. Outside of work she enjoys hiking, camping, reading, and taking classes.

Johnson Joins CFL

Amy Johnson

Amy Johnson joined the Department in September 2003 as the Administrator for the Constructed Facilities Laboratory (CFL). Amy, a native of California, moved to North Carolina in August of 2003. She is a 1995 graduate of the University of California at Irvine where she earned a BS in Psychology and Social Behavior. Prior to her move to Raleigh she spent the last five years working in the Extended Education Department at California State University, Fullerton. Amy will be getting married in July 2004. We wish her and Derek much happiness.

Rogers Joins Undergraduate Office

Charisse Rogers

Charisse Rogers joined the Department in November 2002 as an Office Assistant and accepted the position of Secretary for the Undergraduate Office in March 2003. Charisse and her family moved to North Carolina from Cincinnati, Ohio five years ago. Charisse provides support to both current and prospective undergraduate students. She and her husband are the proud parents of two teenage daughters and follow their competitive cheerleading squads to competitions all over the eastern half of the United States.

Tucker Joins Business Office

Towanda Tucker

Towanda Tucker joined the Department in July 2003 as an Office Assistant and became Departmental Bookkeeper in November 2003. She is a December 2002 graduate of NC State University with a Bachelor of Science in Business Management with a Finance Concentration. Towanda is originally from Nashville, North Carolina, just west of Rocky Mount. In her spare time she likes to bowl, read, and follow Wolfpack sports as well as Lakers basketball.

Johnston Selected for ACI Award and Appointment

Dr. David W. Johnston was awarded the Delmar L. Bloem Award for Distinguished Service by the American Concrete Institute (ACI) in 2003 in recognition of his leadership as chair of the ACI Technical Committee on Concrete Formwork. His research on lateral pressures of concrete in formwork has resulted in the first major changes in the ACI formwork design recommendations in over 40 years. Johnston has also been appointed by the ACI Board to the 12-person ACI Technical Activities Committee (TAC), which reviews and approves all reports, codes and specifications of the over120 ACI technical committees, convention technical sessions, technical committee formation, and committee chair appointments.

Dr. David W. Johnston

Rizkalla Selected for ACI Award

Dr. Sami H. Rizkalla was awarded the Delmar L. Bloem Award for Distinguished Service by the American Concrete Institute (ACI) in 2004. Rizkalla, a Distinguished Professor of Civil Engineering and the Director of the Constructed Facilities Laboratory, received the award in recognition of his leadership of the ACI Technical Committee on Fiber Reinforced Polymers (FRP). For the past ten years Dr. Rizkalla has focussed his research efforts on the use of FRP in the rehabilitation, strengthening, and repair of bridges and other structures; as well as the application of FRP in new construction.

Dr. Sami H. Rizkalla

Frey Appointed to EPA Advisory Panel

Dr. H. Christopher Frey has been appointed to the EPA's Scientific Advisory Panel for the Federal Insecticide, Fungicide, and Rodenticide Act. The Panel provides recommendations to the EPA concerning pesticide impact on health and the environment. Frey, an Associate Professor in Civil and Environmental Engineering, is an internationally recognized expert in probabilistic exposure assessment and was nominated by the National Institutes of Health and will serve a four year term.

Dr. H. Christopher Frey

Dr. Malcom Retires

Dr. H. Rooney Malcom, Professor of Civil Engineering, retired at the end of the 2003/2004 academic year having served as a member of the faculty for 31 years. He first came to NC State as a freshman in 1954. He has spent 40 of the last 50 years in direct association with the University. Dr. Malcom is a registered Professional Engineer and a hydrologist whose greatest satisfaction has come from teaching undergraduates, graduate students, and practicing professionals the fundamentals of storm water management. As a testament to Dr. Malcom's character, and the deep felt appreciation by his former students for the way in which he touched their lives both personally and professionally, a number of his former students rallied together and established an endowment in his honor.

The Right Stuff - Pictured above at his retirement reception is Dr. Malcom surrounded by students from three decades of teaching. A framed copy of this picture was presented to him for his study. When he looks at it over the coming years it will be a constant reminder that his choice of vocation was indeed the right one. If you would like to make a contribution to the H. Rooney Malcom Undergraduate Teaching Fund Endowment, make your check payable to "The NC State Engineering Foundation, Inc." In the memo portion of the check write "Malcom Endowment" and mail to: NC State Engineering Foundation, NCSU Campus Box 7901, Raleigh, NC 27695. (Photo courtesy of Burnie Batchelor Studio of Raleigh, NC)

Graduate Program Expands

The enrollment in department graduate degree programs reached a new record of 220 students. A portion of this enrollment is attributed to the new availability of the MCE degree by Distance Education. In Fall 2002, the starting enrollment was 3 admitted distance students. This expanded to 6 in Spring 2003, 16 in Fall 2003, and now 23 in Spring 2004. About 30 additional individuals are taking the CE distance courses by enrolling through the Post Baccalaureate Studies (PBS) program, a means of trying the distance approach prior to seeking admission.

In order to meet increasing needs for studio space and to make the recording of the courses more convenient for the faculty and the on-campus students, Mann Hall room 406 was renovated during the summer of 2003. The renovation split the large room into two classrooms with control rooms, one completely up-fitted as a studio and the other ready for up-fit as demand requires but currently available for conventional classes. Distance education students from across the state and nation take the courses in parallel to the on-campus students. The lectures are transmitted for later viewing by streaming video over the internet or mailed on CD. Our most distant participant is with the US military in England. Course offerings are expanding rapidly through Engineering Online, the College of Engineering unit that facilitates the offerings and enrollment process. Over 30 CE graduate courses have now been offered since 2000 and more are scheduled. For details, see our website at www.ce.ncsu.edu and check out the graduate and distance education links.

Dr. Michael Leming leads CE 561 Construction Project Management in the new distance education classroom.

Fields of Specialization

Members of the faculty welcome interaction with our alumni and friends of the Department of Civil, Construction, and Environmental Engineering. We invite you to contact the faculty when you have a tough technical question or other matters of concern in your practice.

COMPUTER-AIDED ENGINEERING

John Baugh	Abinav Gupta	Margery Overton	John Stone
Leonhard Bernold	Dan Loughlin	Shamimur Rahman	
Downey Brill	Kumar Mahinthakumar	Ranji Ranjithan	
Murthy Guddati	Vernon Matzen	William Rasdorf	

WATER RESOURCES AND ENVIRONMENTAL

Mort Barlaz	Francis de los Reyes	Mo Gabr	Rooney Malcom
Bob Borden	Joel Ducoste	Detlef Knappe	Margery Overton
Downey Brill	John Fisher	Dan Loughlin	Ranji Ranjithan
Allen Chao	Chris Frey	Kumar Mahinthakumar	

GEOTECHNICAL

Bob Borden	Mo Gabr	David Parish
Roy Borden	Debra Laefer	Shamimur Rahman

TRANSPORTATION SYSTEMS AND MATERIALS

Joe Hummer	Richard Kim	John Stone	Billy Williams
Paul Khosla	Nagui Rouphail	Akhtar Tayebali	

CONSTRUCTION

Leonhard Bernold	Mike Leming	Roberto Nunez	Sami Rizkalla
David Johnston	David Lombardi	William Rasdorf	Ed Weaver

STRUCTURES AND MECHANICS

John Baugh	Abhinav Gupta	Mervyn Kowalsky	Jim Nau	David Tung
Murthy Guddati	Kerry Havner	Vernon Matzen	Sami Rizkalla	Paul Zia
Ajaya Gupta	Tasnim Hassan	Amir Mirmiran	Emmett Sumner	

Extension Services

The Department of Civil, Construction, and Environmental Engineering is proud of the relationship we enjoy with the construction industry. We are pleased to support continuing construction education through the following courses.

Concrete Technology Training

- **NDT Evaluation of Concrete Structures**
  This course was developed to teach engineers and technicians about the state of the practice in evaluation of concrete infrastructure by means of non-destructive testing technology.

- **Quality Concrete Slabs on Grade**
  This course teaches contractors the art and technology of building quality concrete slabs.

- **ACI Concrete Finisher Certification (Spanish)**
  This course is an innovative course designed to teach Spanish-speaking workers the basic technology to construct concrete slabs and is the first of its kind in the United States.

- **ACI/NCDOT Concrete Field Technician Certifications - Grade I**
  Through an agreement with the North Carolina Department of Transportation (NCDOT), the extension specialists offer a three-day ACI/NCDOT Concrete School for Concrete Field Technician Grade certification and re-certification (Contechtraining).

All courses are developed in close cooperation with NC State Civil, Construction, and Environmental Engineering Faculty, the Carolinas Ready Mix Concrete Association (CRMCA) and the American Concrete Institute (ACI).

Left - Interior of Constructed Facilities Laboratory of the Department of Civil, Construction, and Environmental Engineering at NC State University

Top Right - Twilight at The Constructed Facilities Laboratory (CFL) on NC State University's Centennial Campus

Continuing Education

- **Masonry Wall Construction Safety Training**
  Developed by NC State Construction Engineering Faculty, this one-day seminar addresses new requirements for safer bracing of masonry walls during construction in the United States. This course is also being offered through a partnership with the Carolinas - Associated General Contractors (C-AGC).

- **OSHA Safety Training (English & Spanish)**
  We offer a wide variety of safety courses on such topics as: Fall Protection, Excavation and Trenching, Lockout/Tagout, Confined Space Entry, OSHA 10 and 30-hour programs, as well as Hazard Identification for Engineers and Architects. A new course on OSHA safety, completely in Spanish was developed and offered for the first time in North Carolina to Spanish speaking contractors.

- **Training for Professional Engineers**
  A program titled "Design Your Own Educational Experience" is offered over a two day period during the Fall. Construction professionals can attend a series of two-hour seminars (up to 16 contact hours) on a wide array of managerial and technical topics. Fall short courses include topics such as: Wind Design Requirements, Wood Design Fundamentals, Stormwater Design Fundamentals, Fiber-Reinforced Polymers, A Construction Professional's Guide to Contracting, Dispute Resolution and Depositions, Design and Construction of Pervious Pavement, Age and Failure of Structures, Deep Foundations.

George E. Langley (BSAE '43, BSCE '47) died June 6, 2002. He founded the firm of Langley & McDonald, LLC in Virginia Beach in 1956. He retired in 1987 and his son, Tom B. Langley (BSCE '75), heads the firm.

Willard E. Thomas (BSCE '49) retired.

Jack M. Harrell (BSCE '50) recently retired from forty years in the paper manufacturing industry.

James F. Brown (BSCE '52) celebrated his 50th wedding anniversary to his wife, Phyllis, in June 2002.

Charles V. Faulkenberry (BSCE '60) has retired from Fluor Daniel, where he was Vice-President and Division Manager in charge of Biotech Engineering/Construction Projects.

Robert J. Bracken (BSCE '67) is Owner of Bracken & Associates, P.A., an engineering and land surveying firm in Sanford, NC. He started the business in 1976 and will retire when his grandson takes over the firm.

George M. Clendenin (BSCE '68) was promoted to State Structure and Bridge Engineer with the Virginia Department of Transportation.

Raymond Agbanobi (PhD CE '72) was selected by the World Health Organization as a finalists in their international competition to discover innovative technologies for the treatment of medical waste in rural areas.

Henry V. Liles (BSCE '74, MCE '81) has been elected as Chair of the North Carolina Board of Examiners for Engineers and Land Surveyors for the 2003 term.

James M. Reed (BSCE '78) is a Lead Stress Analyst on the AWACS Program for Boeing in Seattle, WA.

William T. Fuller (BSCE '83) is President of Fuller Consulting Engineers, Inc., a structural engineering company established in 1998. He is married to Beth and has two children, Janelle, 17, and Sarah, 13.

Shawn P. Sculley, Sr. (MCE '84) is Director of the Kissimmee Division of the South Florida Water Management District in West Palm Beach, FL.

Sepideh S. Asefnia (BSBAE '85, BSCE '93) started the SEPI Engineering Group in May 2001. The firm specializes in Transportation Planning/Design and Construction Inspection. In 2002 she was honored by Women in Business (Triangle Business Journal) and Impact 100 (The Business Leader).

Michael W. Johnson (BSCE '86) recently joined Bridgetek as a Project Consultant. He will be responsible for the greater Raleigh area.

Arthur R. McMillan (BSCE '86) was recently promoted to Assistant State Roadway Design Engineer for the North Carolina Department of Transportation.

B. Keith Pugh (BSCE '87) was named Director of Engineering Services for the city of High Point, NC. He is married to Kim and has two children, Corbin, 14, and Halle, 7.

Thomas L. Koning (MSMEA '89, MSCE '90) was assigned as Commander and District Engineer of the New England district of the U.S. Army Corps of Engineers.

J. Rodney Conner (BSCE '92) owns a small construction company that has been in business since 2001. He is married to Shelly and has two children, Caitlin and Jerrod.

Wesley N. Denton (BSCE '92, MSCE '95) is currently Manager of Program Management in Sprint's Customer Service Operations group in Overland Park, Kansas.

William E. Gasque (BSCE '92) was named Chief Stormwater Engineer for McClure Engineering Associates, Inc., a 190 person planning, engineering, and surveying firm with eight offices in the Midwest.

Patrick C. Bradshaw (BSCE '94) opened his own consulting firm, Bradshaw Engineering, in December 2002. The firm specializes in private development and sitework. It is located in Waynesville, NC.

Charles D. Huffine (BSCE, BSENE '94) is President of Land Engineering and Development Services in Burlington, NC. He and his wife, Robin, have a daughter, Holly, and are expecting a baby in August 2003.

Wendy D. Cockerham (BSCEC '98) is a project engineer for Skanska USA Building Inc. She is married to Jason and has a son, Jesse. The couple is expecting another son in May 2003.

Mona Ellum (BSENE '99) is employed as a Senior Water Resource Engineer at Milone and MacBroom. She, her husband David (BSWB '99), and son Townes, live in Connecticut.

Joshua B. Rose (BSCE '00) and wife, Melody, announce the birth of their daughter, Allison, in August 2002. Joshua is Project Manager with the Greensboro office of D. Miller & Associates, PA.

WE WANT TO HEAR FROM YOU

Name _____ Degree, Year _____

Address _____

City _____ State _____ Zip Code _____

News _____

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