

Promoting Excellence in Research: A Half Century of Rich Tradition for ASEE-SE Research Unit

K. P. Brannan/T. R. Dion
The Citadel

Abstract

The Southeastern Section of the American Society for Engineering Education includes as part of its structure a Research Unit that is involved with promoting and fostering research activities in the Southeastern United States. This unit came into being when the Southeastern Section was organized and has remained an integral part of the Section's activities throughout the years. This paper examines the formation of the Southeastern Section's Research Unit over a half century ago and its past activities including the Outstanding Contributions in Research Award that has helped to recognize and promote research in the Southeastern Section for over four decades. In addition, the leaders who labored to realize their dreams of promoting research in the Southeastern Section and the resources they used are discussed. Finally, an assessment of the Research Unit's current activities and some suggestions for future directions are also provided.

Introduction

In 1956, a sterling silver medallion manufactured by Miller and Woodward of Lexington, Kentucky was awarded to Dr. J. J. Cornish of Mississippi State University. The award recognized the single outstanding research contribution in the southeastern section made during the preceding calendar year and began a rich tradition of research awards that has continued for over 40 years. The concept of a research award to promote and recognize research in the southeastern section was conceived by a dedicated group of individuals in the old Research Division (now the Research Unit) of the Southeastern Section of the American Society for Engineering Education. Funds for a medallion, and later a cash prize that accompanied the medallion, were generated by dividends from stocks that were purchased with donations made to the division.

Although the research award has taken much effort and time over the years, the Research Unit has sponsored other activities designed to promote research in the section. The Research Unit has normally sponsored at least one technical session at section meetings. For example, existing records show that for the 1961 Section Meeting held on April

19 - 20 in Oxford, Mississippi, the Research Division planned a program that would help young faculty members improve their skills in attracting research funding (such as avoiding pitfalls associated with writing proposals).

Unfortunately, in recent years participation in the Research Unit has diminished considerably. The healthy participation that the Unit enjoyed in the past has dropped to surprisingly low numbers. Part of this decrease in participation can be attributed to the renewed interest in teaching methods, the use of technology in teaching, assessment, and other topics not perceived to be associated with research. This has sparked a dramatic shift in interest toward the activities of the Instructional Unit in particular. Without trying to detract from the enthusiasm in teaching and assessment, the Research Unit must address the diminishing participation in its activities, or the rich tradition of the Research Unit and its activities may be in jeopardy.

The purpose of this paper is to summarize the background of the Research Unit, including the Outstanding Contributions in Research Award, acquisition of corporate stocks, and the individuals who have supported the activities of the Research Unit for the last half century. In addition, an assessment of the Unit's current activities will be made, along with a few suggestions for future directions.

Background

Beginnings

In June of 1934, southeastern delegates of the Society for the Promotion of Engineering Education (SPEE, later called the American Society for Engineering Education or ASEE) voted to hold a meeting at Georgia Tech to discuss engineering education problems facing engineering institutions in the Southeast¹. The meeting was held November 9 - 10, 1934 and was attended by 26 individuals representing ten colleges and universities. As a result of this meeting, the SPEE Southeastern Section was organized, and at a meeting the following year officers were elected with Dean Floyd Field of Georgia Tech serving as the first chairperson. Twenty-seven institutions were named in the Constitution adopted at this meeting¹. One of the divisions that formed the new Southeastern Section was the Research

Division. The purpose of this division was to foster and promote quality research in engineering within Southeastern United States.

Research Award

During the 1940's the Research Division attempted to stimulate interest in research while working with almost no resources². In the 1950's enough money was raised to allow the Division to establish a research award to promote and recognize excellence in research. In 1956, at the 22nd Annual Southeastern Section meeting held at Tulane University, the first Outstanding Contributions in Research Award was made. As noted above, Joseph J. Cornish of Mississippi State University was awarded the initial sterling silver medallion that became the hallmark of this award.

Guidelines for qualifying for the research award were not significantly different in the late 1950's from the current guidelines: all faculty having the rank of instructor or higher who had published a technical paper in the previous year were eligible. Each institution could nominate no more than one paper, and each candidate was limited to one paper. In the early years, the Division had to establish policy on questions that were raised concerning the competition guidelines. For example, one suggestion made in 1956 was that the scope of the award should be broadened to include "advancement of Engineering Teaching, Technology or Public Service in addition to Research³." While there was appreciation for the merit of this suggestion, it was felt that this was not in keeping with the intent of the research award. Other questions considered during the early years related to whether certain publications/reports would qualify for the award and whether a candidate had to be a member of ASEE (discussed further in the section on "Assessment").

During the 1950's, a single sterling silver award medallion was apparently produced each year by Miller and Woodward of Lexington, Kentucky for the winner of the award competition. In an effort to save money through "mass production," \$50 of the Research Division's balance of less than \$100 was obligated for the purchase of several medallions. Later, silver-plated replicas of the original medallion were produced because of the prohibitive cost of sterling silver. In 1978, new dies were produced by Josten's and 25 medallions were made for a total cost of \$559.50. Although Josten's had agreed to maintain the die for future production of the medallion, a new die was produced in 1996 to take advantage of a new process, and 25 medallions were made for a total cost of \$298.75 plus shipping and handling costs.

A cash supplement of \$25 accompanied the medallion for the first time in 1961. The original \$25 cash

prize has been increased several times over the ensuing years. In 1968 it was increased to \$100, and in 1976 the award amount was raised to \$150. Four years later it was increased to \$200. In 1982, a sum of \$300 was awarded. Currently, \$350 is awarded annually to the winner of the competition. A certificate has usually been presented to the award winner. In some years, a runner-up was named. The current rules stipulate that the runner-up will receive a certificate. Research award winners from 1956 to the present are shown in Table 1.

Financial Support

After operating during the 1940's with little resources, the Division attempted in the 1950's to raise funds for the purpose of supporting research. During this time period, several institutions were petitioned for funds, and as a result, approximately \$1600 was raised. Since further attempts to raise money were not successful, it was decided to invest the money in AT&T stock. Dividends were used to produce medallions and later, cash awards and certificates, for the winners of the research paper competition. One of the Research Division's active members, Dr. George Hickox, was instrumental in setting up and procuring the AT&T stock for the Division. His plan was for the Division to keep control of stock and the dividends so that the Division could control its assets.

In 1961, the present Research Unit was formed from the old Research Division by action of the Section's Executive Committee. The first meeting of the new Unit was held in Nashville, Tennessee in 1962 when Dr. P. H. McDonald of North Carolina State presided as Chair. Dr. E. C. Woodward received the first cash award of \$25 that year along with a silver medallion.

In 1964, Headquarters of the American Society for Engineering Education informed the Research Unit that the Unit could not independently own monetary assets. The Unit Treasurer at that time, Dr. M. E. Forsman, announced at the 1964 business meeting the decree from National and offered to the Unit's membership the idea of possibly forming an independent non-profit corporation for the purpose of controlling the Unit's monetary assets. The "Southeastern Research Section, Inc.," as it was to be called, would allow the Unit control and solve the problem posed by National. Throughout the ensuing year, negotiations between National and the Unit's officers were intense. Eventually, National changed its position on controlling ownership of the assets; however, its position on organizational accountability was not changed. An agreement was reached whereby the Unit would maintain ownership and control of its assets, while National would play the role of repository and accountability. At the

Table 1. Outstanding Contribution in Research Award Winners			
Year	Winner	Runner-Up	Institution
1956	J. J. Cornish		Mississippi State University
1957	W. A. Nash		University of Florida
1958	P. H. McDonald		N. C. State College
1959			
1960	F. E. Richards		University of Florida
1961	E. C. Woodward		University of South Carolina
1962	R. E. Uhrig		University of Florida
1963	R. Kinslow		Tennessee Polytechnic Institute
1964	D. Kuhlmann-Wilsdorf		University of Virginia
1965	D. Kuhlmann-Wilsdorf		University of Virginia
1966	O. W. Dillon		University of Kentucky
1967	D. F. Bruley	T. R. Robe	Clemson University
1968	T. T. C. Hsu		University of Miami
1969	L. J. Arp		VPI and SU
1970	S. J. Wolfe		Clemson University
1971	G. Cook		University of Virginia
	H. Mott		University of Alabama
1972	D. G. Childers		University of Florida
1973	L. L. Hench		University of Florida
1974	J. F. Thompson		Mississippi State University
1975	Z. U. Z. Warsi		Mississippi State University
1976	R. M. Mersereau		Georgia Institute of Technology
1977	M. A. Townsend		Vanderbilt University
1978	J. G. Fossum		University of Florida
1979	L. K. Peters		University of Kentucky
1980	J. B. Morton		University of Virginia
1981	M. G. Mohamm		Georgia Institute of Technology
1982	R. L. Phillis		University of Central Florida
1983	W. C. Strahle		Georgia Institute of Technology
1984	D. E. Beasley		Clemson University
1985	T. K. Gaylord		Georgia Institute of Technology
1986	A. K. Stiffler		Mississippi State University
1987	D. P. Telionis		VPI and SU
1988	S. R. Bell	O. Ozdamar	University of Alabama
1989	F. C. Townsend	E. B. Makran	University of Florida
1990	K. Premaratne	W. C. Schreiber	University of Miami
1991	R. Abbaschian	A. Siginer	University of Florida
1992	H. V. Tippur	W. M. Haddad	Auburn University
1993	Kirk Hatfield		University of Florida
1994	B. K. Hodge		Mississippi State University
	Robert W. Cohn		University of Louisville
1995	Autar K. Kaw		University of South Florida
1996	Ravi Sankar		University of South Florida

April 12, 1965 annual meeting, the Research Unit resolved that the AT&T stock be held by Headquarters in the name of the Research Unit and that the dividends be deposited in the Research Unit's bank account. Prior to 1992, Research Unit funds were maintained at a bank. In 1992, the bank account was dissolved and Research Unit funds were moved to a local BASS (Banking and Accounting Services System which is

administered by ASEE headquarters for all ASEE units) account. Dividends are now deposited into the BASS account. The account is separate from the account in which Southeastern Section funds are maintained. One of the reasons for the change from a bank account to a BASS account was that high services charges at the bank were slowly depleting the funds in the bank account.

Financial growth of the Unit has steadily increased over the years, providing the Unit with a financial base to achieve the original Research Division's goal of fostering and stimulating research. Table 2 illustrates the growth of the Unit's financial assets (although all transactions are not indicated in the table).

Table 2. Research Unit Assets		
Year	Balance	Assets
1957	\$73.89	
1958	\$151.87	1 Share AT&T Common Stock
1963	\$96.39	32 Shares AT&T Common Stock
1969	\$70.39	74 Shares AT&T Common Stock
1979	\$633.43	74 Shares AT&T Common Stock; 3 Shares Preferred Stock; 2 ea. 8.75% Debentures
1997	\$1526.91 (Mar. 31)	74 Shares AT&T Common Stock; 171 Shares Bell South Stock; 24 Shares Lucent Technologies inc. Stock, 4,8125 Shares NCR Stock, \$3271.76 in a Certificate of Deposit

Officers and Membership

A group of dedicated officers placed the research award competition in motion in the mid-1950's and laid the sound financial foundation that has enabled the award competition to continue for over four decades. N. W. Conner served as Chairman of the Research Division in 1957, followed by Jesse Coates of LSU in 1958, R. G. Strum of Auburn University in 1959, and M. E. Forsman of the University of Florida in 1960. Other individuals serving as officers during this time period include Merle Baker of the University of Kentucky, M. H. Chetrick of the University of Louisville, and P. H. McDonald of North Carolina State University. G. H. Hickox (who at one point worked at the Engineering Experiment Station at the University of Tennessee and later was employed at the U. S. Army Engineer Research and Development Laboratories at Fort Belvoir, Virginia, and for Boeing in Seattle, Washington) remained active throughout the decade in working with the stocks. Even after moving out of the Southeastern Section, he maintained contact with the officers of the section in providing information needed by the Unit. M. E. Forsman not only served as Chairman of the Unit, but served as the "permanent treasurer" until 1973. Joe Reece of Auburn University served 10 years as treasurer (1975 - 1984). Sam Gambrell of the University of Alabama began a lengthy period of service in 1976, when he was elected secretary of the Unit. He served in a number of positions over the next 10 years, before he began an eight-year period as treasurer (1985 - 1992). In 1993, by action of the Research Unit and the

Southeastern Section, the secretary-treasurer of the Section also holds the office of treasurer of the Research Unit. A list of Research Unit Officers from 1962 to the present is shown in Table 3.

Based on available records, until recent years the business meeting of the Research Unit at the annual Southeastern Section meeting has been well-attended. A check of available records from 1958 to 1978 shows that attendance varied from 17 to 40 during these years. Attendance in the 1990's apparently declined as many new members attending section meetings elected to attend the Instructional Unit Business Meeting and paper presentation and many established members attended the Administrative Unit meeting.

Assessment of Research Unit Activities

An assessment of the current Research Unit activities must begin with the original goal of the old Research Division: promoting research in the Southeastern Section, including recognizing the outstanding research achievements of those in the Section. The focus of the Unit's efforts to promote and recognize research excellence has been the Outstanding Contributions in Research Award initiated in 1956. Despite the decline in participation in the Unit at Section meetings, the announcement of the award has been made annually to approximately 70 institutions located in the Southeastern Section. Unfortunately, the number of nominations received by the section has decreased considerably, from approximately 10 to 20 nominations throughout much of the history to less than 10 nominations over the last few years.

It should be noted that even in the early years, the officers wanted more participation on the research award competition. The minutes of the 1958 Section meeting relate that N. W. Conner, Chairman of the Research Division in 1957, commented on problems in generating interest in obtaining nominations from member institutions. He moved that each member of the Southeastern Section be sent an announcement. This was done the next year in a joint letter from the Chairman and Secretary/Treasurer. Today, an attempt is certainly being made to reach a large percentage of the membership; not only is an announcement included in a packet of award announcements mailed to each institution's dean but an announcement is also placed in the newsletter distributed to the Southeastern Section membership. This year the newsletter will be mailed earlier than in the recent past, and that may help increase the number of nominations by providing more time to respond to the announcement. Nonetheless, much depends upon the initiative of the dean, since a single paper must be selected from each school. To

Table 3. Research Unit Officers				
Year	Chair	Vice-Chair	Secretary	Treasurer
1962	P. H. McDonald	C. E. Littlejohn	W. M. Neale	M. E. Forsman
1963	C. E. Littlejohn	W. M. Neale	F. J. Maher	M. E. Forsman
1964	W. M. Neale	F. J. Maher	D. M. Vestal	M. E. Forsman
1965	F. J. Maher	D. M. Vestal	J. F. Thorpe	M. E. Forsman
1966	D. M. Vestal	J. F. Thorpe	E. I. Brown	M. E. Forsman
1967	J. F. Thorpe	J. A. Edwards	Ray Kinslow	M. E. Forsman
1968	J. A. Edwards	Ray Kinslow	R. I. Vachon	M. E. Forsman
1969	Ray Kinslow	R. I. Vachon	B. E. Ross	M. E. Forsman
1970	R. I. Vachon	B. E. Ross	C. M. Butler	M. E. Forsman
1971	E. I. Brown	C. M. Butler	J. Counts	M. E. Forsman
1972	C. M. Butler	J. Counts	M. E. Raville	M. E. Forsman
1973	J. Counts	M. E. Raville	M. W. Milligan	M. E. Forsman
1974	M. E. Raville	M. W. Milligan	K. R. Purdy	J. Reece
1975	M. W. Milligan	K. R. Purdy	Walter Castro	J. Reece
1976	K. R. Purdy	Walter Castro	Sam Gambrell	J. Reece
1977	Walter Castro	Sam Gambrell	Jeff Tenant	J. Reece
1978	Sam Gambrell	Jeff Tenant	R. J. Beil	J. Reece
1979	Jeff Tenant	R. J. Beil	R. D. Snyder	J. Reece
1980	R. J. Beil	Paul DeHoff	M. E. Raville	J. Reece
1981	Paul DeHoff	M. E. Raville	Joe Wilkerson	J. Reece
1982	M. E. Raville	Joe Wilkerson	R. D. Snyder	J. Reece
1983	Joe Wilkerson	R. D. Snyder	S. C. Gambrell	J. Reece
1984	R. D. Snyder	S. C. Gambrell	George Swisher	J. Reece
1985	R. D. Snyder	George Swisher	D. E. Beasley	S. C. Gambrell
1986	George Swisher	D. E. Beasley	T. K. Gaylord	S. C. Gambrell
1987	D. E. Beasley	T. K. Gaylord	S. Dwivedi	S. C. Gambrell
1988	S. Dwivedi	M. Deisenroth	D. P. Telionis	S. C. Gambrell
1989	C.C. Strange, Jr.	L. David Shen	Stuart R. Bell	S. C. Gambrell
1990	L. David Shen	Stuart R. Bell	F. C. Townsend	S. C. Gambrell
1991	Stuart R. Bell	F. C. Townsend	K. Premaratne	S. C. Gambrell
1992	F. C. Townsend	K. Premaratne	R. Abbaschian	S. C. Gambrell
1993	K. Premaratne	J. A. Murden	Kevin Walsh	K. P. Brannan*
1994	J. A. Murden	Kevin Walsh	Kirk Hatfield	K. P. Brannan
1995	Kevin Walsh	Kirk Hatfield	BK. Hodge	K. P. Brannan
1996	Kirk Hatfield	BK. Hodge	T. R. Dion	K. P. Brannan
* Research Unit's finances handled by Southeastern Section Treasurer after 1993				

continue the award competition with the degree of success experienced in most of the past history, the Research Unit should consider how to draw attention to the prestige of the award and encourage deans and other key personnel to help in securing nominations from their schools. For example, perhaps a letter mailed to each dean (in addition to including an announcement in the dean's packet of awards) describing the significance of the award would help to alert the deans to the award (particularly the new deans).

Over the years, there have been a number of suggestions as to changes that should possibly be made in the award. One study⁴ made by a subcommittee in 1971, recommended a redesigned certificate be awarded to persons

nominated from each school and steps be taken to ensure that individuals be duly recognized for their contribution (this would require more effort, but would recognize the efforts of more researchers; namely, those who were nominated but did not receive the award). The subcommittee also suggested that two awards be given - one to a senior faculty member and another to a young faculty member.

Another factor that may have been significant in reducing the number of nominations is that in 1993 a decision was made to limit nominations to ASEE members. For a number of years prior to 1993, it was the custom that the award winner be given the opportunity to serve as an officer and was usually elected secretary. Eventually,

however, some award winners were not able to serve as officers or participate in the section, possibly because of commitments to other organizations. The decision to limit nominations to ASEE members was made in an effort to recognize those researchers who had been participating in ASEE, and in the process strengthen the Unit by encouraging participation by the award winner in the Research Unit. It is not certain whether this policy has improved participation significantly. Interestingly, the question of whether to receive nominations from ASEE members arose as early as 1958. Chairman J. Coates explained in a letter to Dean J. W. Mason of Georgia Tech that there was nothing in the rules of that year that required a nominee to be a member of ASEE, and that position was maintained until 1993. Although there are a number of factors to weigh, the Unit may wish to revisit this question and see if the current policy best contributes to the goals of the Unit.

Low attendance at recent Research Unit sessions and business meetings is probably a result of slow change in the interests of those who attend Section meetings. In a decade where people have come to Section meetings with an active interest in new teaching techniques in engineering education, teaching with computer technology, the role of assessment in engineering education, etc., a greater percentage of people have focused on the activities of the Instructional Unit. This does not necessarily mean that there is little interest in research; however, faced with a choice, fewer people are being attracted to the Research Unit at the present time. Last year, the Research Unit officers decided to try to move the Research Unit business meeting/research award presentation to another time to give people an opportunity to attend the Research Unit meeting without conflict. This kind of thinking is vital to renewing participation in the Unit.

New emphases in the Research Unit technical sessions may be valuable in stimulating interest in research-related areas and in meeting the needs of those attending the conference. For example, papers highlighting student research initiatives (especially those involving undergraduates) may generate interest - especially for faculty members looking for new ideas or wishing to refine some of their current projects. One-session workshops on how new faculty members can develop certain research-related skills may generate some interest. In any event, the Research Unit should consider how to breathe new life into its technical sessions. If the Unit can achieve this with some degree of success, it may help add new members to the Unit's roles who can help promote the primary goal of the Unit.

Finally, it should be noted that the financial condition of the Unit is healthy at the current time. If the Unit identifies a need or an initiative (e.g., increase the award amount, purchase more stock, purchase additional certificates

to be presented to the nominee from each school either at the awards ceremony or at an appropriate ceremony held at the nominee's school, etc.), there are some funds available.

Concluding Comments

The role the Research Unit has played for over 50 years in ASEE's Southeast Section has been one of stability, giving support to Section efforts in improving engineering education research. Through the efforts of many, a rich and intellectual heritage has been established, and this heritage continues to be nurtured today. Unfortunately, participation in the Unit's activities has dropped in the last few years. This paper attempts to assess why participation appears to be diminishing and suggests a few measures the Unit may consider adopting to help enhance the success of the Unit. With the enthusiasm of the Unit's pioneers, the current unit leadership is already actively engaging others to become involved and contribute to the Unit's success into the next century.

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KENNETH P. BRANNAN

Dr. Kenneth P. Brannan is an associate professor of Civil and Environmental Engineering at The Citadel. He has five years of consulting experience as an environmental engineer and nineteen years of teaching experience. An active member of ASEE, Dr. Brannan is President-Elect of the Southeastern Section and the ASEE Campus Representative at The Citadel. He was co-recipient of the Thomas C. Evans Instructional Paper Award for 1990. He holds B.C.E. and M.S. degrees from Auburn University and a Ph.D. degree from Virginia Polytechnic Institute and State University. Dr. Brannan is a registered professional engineer in Alabama and South Carolina.

THOMAS R. DION

Col. Dion graduated from The Citadel in 1968 with a B.S. degree in Civil Engineering. He earned an MS degree in Civil Engineering from Clemson University in 1973 and became a registered professional engineer and land surveyor in the state of South Carolina in 1976. He became a full time faculty member of the Civil and Environmental Engineering Department at The Citadel 22 years ago when he began teaching undergraduate students. Col. Dion is currently serving as Vice-Chair of the Research Division for the Southeastern Section of ASEE.