

MINUTES OF THE SIXTEENTH ANNUAL MEETING OF THE  
SOUTHEASTERN SECTION OF THE AMERICAN SOCIETY FOR  
ENGINEERING EDUCATION  
April 20, 21, 22, 1950

The sixteenth annual meeting of the Southeastern Section of the American Society for Engineering Education was held at Roanoke and Blacksburg, Virginia with the Virginia Polytechnic Institute as the host on April 20, 21, 22, 1950.

A total of 197 engineering educators and their wives registered for the meeting. The first day was devoted to the Research Branch meeting and the proceedings are not recorded in these minutes.

The second day was devoted to meetings of the Section and was held on April 21. The group left at 8:15 AM from Hotel Roanoke for Blacksburg. At 9:40 AM a student convocation was held at Burruss Hall auditorium with Prof. J. W. Whittemore, Associate Dean of Engineering at VPI presiding. Dean E. B. Norris, Dean of Engineering at VPI introduced Mr. L. F. Livingston, Manager, Extension Division, E. I. duPont de Nemours & Co., Wilmington, Delaware, who addressed the group on "Progress in Better Living". Industrial freedom to create and develop new products was hailed by Mr. Livingston as the reason America has the highest standard of living in the world. "We have the things we want because our system works better than any in the world", the duPont official told the group. "The story of the production of goods and services is the story of our standard of living", he said. He displayed scores of duPont chemical products -- some of which are so new there is no known commercial use for them at the present time. "We have our high standard of living because we have a vast industrial system in this country that converts raw or unfinished materials into useful products which are the true wealth," he said. One of the new developments he discussed was titanium, a metal which has many properties of stainless steel, but is only half as heavy. He said that duPont hopes this new metal eventually will provide an entirely new family of structural materials and reported scientists are now experimenting with the metal in testing its applications. The duPont official also said as soon as the company can complete a new plant at Camden, South Carolina, it will begin the manufacture of a new product known as "Orlon", an acrylic fabric. Its resistance, he reported, makes it a better material for awnings, automobile tops and other outdoor uses. Developments which help create better living, he said, "do not come into being and change our way of life overnight" because "they enter into our everyday living and business activity only after a large number of forces and individuals have had a chance to play their respective parts and make their contributions. DuPont, he said, is one of the big businesses and "we are proud of this business, because under the American system today only a concern which satisfies its customers can become big."

After the convocation at 10:45 AM, Col. H. G. Haynes, Chairman of the Section, presided and appointed the following committees who were requested to report at the business session the following day:

Committee on Nominations: Dean J. E. Hannum, Chairman, Alabama Polytechnic Institute  
Dean F. J. Lewis, Vanderbilt University  
Dean R. C. Ernst, University of Louisville

Committee on Place of Meeting: Dean L. J. Lassalle, Chairman, Louisiana State University  
Dean D. V. Terrell, University of Kentucky  
Dean L. H. Johnson, University of Mississippi

Committee on Resolutions: Dean S. B. Earle, Chairman, Clarkson College  
Dean J. H. Lampe, N. C. State College  
Dean H. V. Flinsch, Mississippi State College

Prof. T. C. Brown, Associate Professor of Mechanical Engineering, spoke on "Survey of Drawing and Graphic Arts in Engineering Schools". He stated the following as to the purpose of his study: "The Drawing Division staff of N. C. State College has felt a need for evaluating the courses and the teaching methods used at this school. With the knowledge and sincere belief that Basic Graphics constitute one of the fundamentals in all engineering curricula, a study has been started to determine, first of all, what our possibilities are as compared with other schools in the nation. The Drawing Division staff also realizes the paramount importance of good teaching in these basic courses since it is in this area that the engineering student first begins to orient himself in his chosen field. The purpose of this study, therefore, is to determine the amount of time that the students are on class under the supervision of the teacher. The study emphasizes the amount of time at the teachers disposal for teaching the students in these Basic Graphics courses." The results of Professor Brown's study are summarized below:

1. Total amount of graphics offered averaged 274 clock hours.
2. Total amount of graphics used averages about 240 clock hours.
3. Average amount of basic engineering drawing is about 155 hours.
4. All schools and curricula require basic engineering drawing.
5. Average amount of basic descriptive geometry is about 87 hours.
6. Three-fourths of the schools surveyed require basic descriptive geometry in all curricula.
7. An average of 95 hours of advanced engineering drawing is offered by 42% of the schools surveyed and required in all curricula by 8%.
8. An average of 62 hours of advanced descriptive geometry is offered by 8% of the schools surveyed.
9. Three-fourths of the schools surveyed require outside reading in both drawing and descriptive geometry.
10. Forty-three percent of the schools surveyed require outside sketching in drawing and outside drawing in descriptive geometry.
11. Twenty-four per cent of the schools surveyed require outside drawing in drawing and outside sketching in descriptive geometry.
12. Twenty percent of the schools surveyed require outside reading, sketching, and drawing in both drawing and descriptive geometry."

Prof. M. I. Mantell, Professor of Civil Engineering, University of Miami, spoke on "A Statistical Survey of Trends in Engineering Education." He attempted to show the reasons for and means of halting the trends toward expansion of the engineering undergraduate curricula, for a return to the 120 credit bachelor degree; and possibly even reasons for shortening the total period of formal full time education, that is greater dependency on industry and adult education. His statements were made upon the basis of extensive evidence showing the wasteful duplication and overlapping of courses in high school and college, which duplication should be eliminated to make room for that which we have no time to present. The speaker's recent study of 826 cases has indicated that the

high school courses usually required or recommended for entrance to engineering schools are of little or now value as preparation for advanced engineering work. His tabulation of graduate record examinations at the University of Miami indicated that cultural attainment is not dependent upon formal college courses. He stated that education should be recognized as a life long process. He further stated that the engineering undergraduate program is a single period in the total educational span which is a period which lies between the high school and the graduate school, or in-service educational program; and the undergraduate curricula should perform an all important function during its period of four years -- only four years.

Prof. D. H. Pletta, Head, Department of Applied Mechanics, Virginia Polytechnic Institute, spoke on "A New Approach to the Doctor's Degree". He said, "Briefly the proposal is this: stop the patchwork bolstering of the curriculum and integrate the overall educational requirements for true professional stature, as the other professions have done. The plan would include a four year course in the humanities, basic engineering science and personnel management, terminating with a B.S. Degree; followed by two more years of specialization in one of the engineering branches on a high graduate level for those who have the ability, and culminating in a one year internship, a Doctor of Engineering Degree and professional registration." He further stated that "Supplementary specialized instruction should follow the four year program in another two years of study. The first of these would allow coverage of the several fields of a particular branch of engineering. One electing Civil Engineering for instance, would study the broad fields of sanitation, surveying and mapping, transportation, construction and structural design. The sixth year would then be devoted to a further specialization of one of these, say structures and include elasticity, plasticity, vibrations, fluid mechanics and highly indeterminate structures. Successful completion of these additional two years of professional training would entitle the individual - not to the necessity of pursuing a thesis in some narrow field - but to a broad internship. He would visit large industrial and governmental research laboratories for perhaps several months, and gain a better insight into overall research programs and techniques than by conducting his own thesis. He would also be apprenticed to production managers and corporation presidents as their special assistants for short periods of time to see how the "top brass" operates. He would spend some time on construction jobs or on production lines, and in design rooms. This period should be labeled an internship for this word has been already accepted by the public as connoting completion of an academic professional course of study, and initiation of professional practice under legally qualified practitioners."

Prof. L. R. Quarles, Chairman, Committee on Graduate Studies, University of Virginia, spoke on "An Extension Program on the Graduate Level". He said, "the faculty of Engineering attempted to meet and, we believe, has succeeded in solving the problem. The experience gained with non-credit extension engineering courses over nearly twenty years proved invaluable in formulating a graduate program which culminated in 1948 with a master's degree program under which an appreciable part of the student's work may be done at remote centers." He further stated "Our general requirements for a Master of Engineering degree are fairly standard, a minimum of twenty-four semester hours of formal class work, of which at least twelve must be in the student's major, original research reported in a satisfactory thesis, and a final comprehensive examination. The residence requirements is two semester, but under the instructional center arrangement a maximum of one semester residence credit can be obtained for work done at an instructional center operated and supervised by the Department of Engineering.



This means that an employee of an industry or laboratory near one of the instructional centers can complete his work for a master's degree by taking twelve semester hours of class work during two eight-week summer sessions at Charlottesville, and doing the other twelve hours of class work and his thesis research while living and working at home. In some cases the residence requirements are met with accumulated vacation time, in others by leave with or without pay."

Dr. J. Douglas Fuller, Professor of History, Virginia Military Institute spoke on "The Role of Geopolitics in Contemporary Education." He surveyed in general terms the importance of geopolitics in the modern world. He defined geopolitics as the "geographic study of the state from the viewpoint of foreign policy, and examines the general principles underlying international affairs." He stated that "geography is of increasing importance in determining the present course of world events." Doctor Fuller further stated that "a knowledge of rapid change in the meaning of geographic facts in the past 100 years makes understandable contemporary relations between the United States and Russia. Without general public understanding of these facts, the United States may lose the Cold War and the democratic way of life along with it."

The morning meeting adjourned at 12:15 P.M.

Following the morning meeting the visitors and their wives were entertained at a delightful luncheon on the campus as guests of Virginia Polytechnic Institute. Dean Earle B. Norris, Vice Chairman of the Section presided at the luncheon. The address of welcome was delivered by Dr. Walter S. Newman, President of VPI, who extended greetings from his institution and made everybody feel at home. Greetings from the executive board of the national office of ASEE were given by Dr. Henry M. Anasby, Vice-President. He spoke principally about the forth coming meeting of the Society to be held in June at Seattle, Washington.

In the afternoon group conferences were held in the various departments of VPI. Each instructional department was open to the visitors who were much impressed with the staff and facilities of the institution.

The evening session was held at Hotel Roanoke and was presided over by Col. H. G. Haynes, Chairman of the Section. Colonel Haynes thanked all who had contributed to the success of the meeting and introduced the chairmen of the local committees. Dean Norris, Vice Chairman of the Section introduced the speaker of the evening, Col. Walter R. Godard, U.S.A.F., Industrial College of the Armed Forces, Washington, D. C. Colonel Godard spoke on "World Communism and Its Pattern of Aggression". Admitting his views were strictly his own, Colonel Godard told the group that there is no immediate worry of an all-out offensive against this country. "But just wait until 1956," he added significantly. Colonel Godard spoke forcefully and utilized a chart as he attempted to hammer home to his audience the real threat of Communist aggression. He cited the 1956 date because he said he believed the Russians had failed to maintain their timetable of preparation. But while they are marking time, the Air Force Colonel warned that Russian secret police and underground Communist forces are already making inroads in the next countries on their list. To illustrate his point, he maintained that FBI men were forced to fight off a group of men who attempted to "rescue" escaped Russian fliers in the middle of Washington, D. C. "I'm not saying they were Russian secret police," he remarked. "But what do you think they were?" Insisting that name-calling was not a defense against communism, Colonel Godard said he wished "people would stop mouthing about the American Way of Life and free enterprise, when they know nothing about them and are only interested in their own little selfish gain." "What do they mean when they use these phrases?" he asked. "Do they talk for a starving Navaho Indian, the real

estate lobby in Washington or just for themselves?" Instead of mouthing banalities and calling educators Communists "if they happen to espouse liberal ideas," Colonel Godard demanded understanding of the true nature of communism. "Communists aim at world conquest and Joe Stalin has written it down 75 times for anyone who wants to read it," he emphasized. "There are only two reasons for failure to understand communism: ignorance and refusal to face the truth," he continued. Colonel Godard urged all Americans to become torch bearers for the principles of competition, capitalism and the profit motive, some of the reasons this country is as great as it is. American can clean up its system and tell the world about it, he added.

At 7:30 A.M. on Saturday, April 22, the Deans held a breakfast meeting at which Dean Norris presided. He called attention to the relaxation method school to be held at VPI during the summer and found that all institutions were planning to send a representative. It was estimated that approximately 100 would be in attendance at the school. Dr. Russell S. Poor, Chairman, University Relations Division, Oak Ridge Institute of Nuclear Studies, was called upon to explain the engineering practice school at Oak Ridge. The purpose of the Practice School at Oak Ridge is the education of graduate students from the Massachusetts Institute of Technology in several fields of engineering under a program which is designed to develop their ability to apply basic principles to the solution of technical problems encountered in industry. Since human relations are often decisive for the success of an engineering enterprise, the course stresses cooperative action among the students and with the plant organization. The Practice School program provides education in atomic energy and its related fields with emphasis on the engineering aspects of atomic energy production. It was moved, seconded and passed that a committee be appointed to report back to the group as to the School. Dean Norris appointed the following committee: Dean N. W. Dougherty, Chairman, Dean R. C. Ernst and Dean Joseph Weil. Dean Dougherty then asked the group whether they would like to have another meeting at Fontana Dam, North Carolina, this summer. It was moved, seconded and passed that the meeting be held. Dean Dougherty was requested to serve as Chairman for the meeting and to make all arrangements including the program.

Dean J. Harold Lampe, Dean of Engineering, N. C. State College, then made a statement as to the Nuclear Engineering Program which is being initiated by the engineering school of his institution. He stated that the program will be effectuated as of September 1950 and will be given by the Physics Department of which Dr. Clifford Beck is head. He further stated that "it is the growing feeling on the part of many people that basic training of men in the increasingly important field of nuclear technology should be undertaken by the established educational institutions of the country. Specialization in this field, especially in connection with classified projects, must, of course, be provided by "on-the-job" training. But the situation in this regard is really little different from that existing in, say, chemical or electrical engineering, where in a normal training period, only the basic features and not the diverse specializations, can be provided.

"Thus far there have been three barriers to initiation of sound nuclear technology training programs in the colleges and universities:

1. Lack of trained staff, which is one indication of the urgent need of training opportunities;

2. Lack of course material, or at least lack of compiled, organized material in readily and easily teachable form. Contrary to prevalent impressions, a vast amount of material and information is available, and this includes 100% of that needed to provide sound, basic training. True, much of the material is not organized and assimilated in textbook form, but it is available; and placing it into usable form is really one of the functions normally performed by colleges, incidental to their training program;
3. There is an uneasy impression of mystery and untouchableness about nuclear subjects which causes many of those not intimately initiated to shy away. No attitude, however, could be more disastrous to the discharge of well-balanced, intelligent citizens from our schools. We must face the issues, and sound basic training programs in the schools can do more good in this direction than in any other."

Dean L. J. Lassalle, Dean of Engineering, Louisiana State University, and Chairman of the Committee on Place of Meeting, stated to the group that his committee had an invitation to hold its next meeting somewhere in Mississippi next year after which the breakfast meeting adjourned at 9:50 A.M.

At 9:50 A.M. the final meeting of the Section was held with Colonel Haynes, Chairman, presiding. The first paper was on "Chemical Engineering Curriculum", by Dr. F. C. Vilbrandt, Head, Department of Chemical Engineering, Virginia Polytechnic Institute. He stated that "the compilation and review of the various course offerings in the Chemical Engineering Departments of Southeastern colleges was assigned by the chairman of the Southeastern Section of the American Society of Engineering Education for presentation at this meeting for two reasons; first, to ascertain what might be considered a desirable curriculum in chemical engineering in the Southeastern Colleges; and second, to ascertain what each head of the department of chemical engineering would consider the Core Courses in his own curriculum. A committee or an individual cannot set itself or himself up as an authority, but only can compile the data and analyze some of the findings. The departments of chemical engineering are subject to supervision over their curricula to a limited extent by the Accrediting Committee of the American Institute of Chemical Engineers. The latter does not set up an inflexible curricula requirement, but does feel that certain basic chemistry, chemical engineering, physics, mathematics, mechanics, and cultural subjects should be included in a curricula which would be satisfactory to the committee on accrediting. This committee does allow a considerable flexibility and specialization, depending upon the facilities and staff at the various institutions; it is felt that essential Core Courses are necessary and that it is expedient for all departments desiring accrediting to conform."

The second paper was on "Civil Engineering Curriculum" by Prof. A. F. Granger, Head, Department of Civil Engineering, University of Tennessee. He stated that "in accordance with the directions given at the Fontana meeting, the Committee presents herein a suggested typical Civil Engineering Curriculum, with provisions for flexibility to suit individual needs. In preparing the curriculum, consideration has been given to the following matters:

- Four or five year curriculum
- Options within Civil Engineering
- Current curricula of various institutions



Reports of the Committee on Aims and Objectives of Engineering  
Education, and Engineering Education after the War  
Reports of the ASCE Committee on Civil Engineering Education, and the  
Cooperative committee of SPES (ASEE), including the questionnaire  
sent out by these Committees  
Effect of the Cooperative Plan  
Summer Surveying Camps  
Quarter Basis or Semester Basis  
"Common Core" Material  
and others

"In order to present a specific and concrete curriculum, it has seemed best to arrange a regular four year course in Civil Engineering and to list for each year the courses to be included, by subject matter and quarter hours or semester hours, without attempting to specify exactly how the courses are to be divided into quarters or semesters." In conclusion Professor Granger stated "the committee has presented a typical suggested Curriculum for a general four year Civil Engineering Curriculum. It has discussed the effect of numerous pertinent matters on this Curriculum, and has indicated ways in which it may be adjusted to suit varying needs and conditions; it has indicated percentage zones for time allocation to the various groups of subject material which appear to provide proper and reasonable flexibility. It is the opinion of this Committee that the proposed Curriculum, together with the suggested permissible methods of modification, provides sufficient uniformity and also sufficient flexibility; that it takes due account of past experiences, present practice, and the recommendations and studies of other groups and committees which have investigated the subject; and that it offers sufficient possibility of adjustment to meet the changing needs and developments of the near future. The Committee therefore the adoption of this report as a guide to the institutions of the South-eastern Section of ASCE in the further study of their Civil Engineering curricula."

The third paper was on "Electrical Engineering Curriculum" by Prof. W. F. Gray, Head, Department of Electrical Engineering, University of Alabama. Professor Gray was unable to be present at the meeting and his paper was read by Prof. Sherwood King of the University of Tennessee. The paper stated "this committee has prepared the attached curriculum which, inasmuch as possible, represents the combined thoughts of all committee members. No attempt was made to establish communication or power options as any such differentiation should be in the senior year only and would be of no consequence in the study of the common core of engineering curricula."

"The suggested freshman year is, it is believed, one which in general is quite commonly accepted in all branches of engineering. Machine Tools is perhaps more often suggested for the sophomore year; however, no difficulty should be experienced in teaching such a course during the freshman year. Many students are attracted to the engineering field because of their previous interests in various types of construction, and an early acquaintance with machine tools, together with the courses in engineering drawing, would in many cases prove quite stimulating to a student beginning his engineering education. The Orientation Course which is suggested for the first semester of the freshman year, could be used to assist the beginning student in his transition from high school work to the college program. Acquaintance with the different fields of engineering through lectures and demonstrations by representatives of the various engineering departments should be begun here. The Engineering Problems Course, suggested for the first quarter of the sophomore year, should also aid the student in selection of his particular field of engineering specialization by the use of properly selected problems covering all branches of engineering. The use of slide rules and especially the logic of engineering analysis should be stressed in this problem course."

The fourth paper was on "Mechanical Engineering Curriculum" by Dr. James H. Sans, Vice Dean, School of Engineering, Clemson College. He stated that "the Committee for Mechanical Engineering, appointed by Professor J. B. Jones to make a study of the common core subjects for all branches of Engineering curricula with particular attention to Mechanical Engineering, recommends that the number of semester hours shown opposite the subjects listed below should be included in all Engineering curricula:

	<u>Minimum</u>
1. Mathematics through Integral Calculus	16
Calculus	8
2. General College Chemistry	8
3. English, Composition and Literature	8
4. Public Speaking	3
5. Social Sciences (History, Government, Economics etc)	8
6. General College Physics	8
7. Drawing, including Descriptive Geometry	6
8. Elementary Surveying	2
9. Statics, Dynamics, Strength of Materials & Fluid Mechanics	15
10. Elementary Thermodynamics and Heat Engines	6
11. Elements of Electrical Engineering	6
12. Contracts, Specifications or Engineering Law	3
13. Pattern Making	0
14. Metal Shops	2

"There was fairly close agreement on most subjects listed. The greatest variation occurred in Mathematics through Integral Calculus, which varied from 16 to 20 hours, probably due to the courses being offered either four or five hours a week during the first two years. General College Physics varied from 8 to 10 with three of the five schools giving it 8 hours' credit, and the other two -- 10 hours.

"Item 7, Engineering Drawing, varied from 4 to 10 credit hours with an average of 6. Item 14, Metal Shops, also varied from 2 to 6 hours with the majority of the schools recommending 2 hours. It is felt that the number of hours listed above should be considered as a minimum for basic Engineering curricula."

The next paper was on "Coordination of the Common Core" by Dean Fred J. Lewis, Dean, School of Engineering, Vanderbilt University. He stated that "in September of 1949 administrative officers and members of the teaching staffs of the engineering schools of the Southeast gathered at Fontana, N. C. for a workshop session. The three days were spent at this wonderful resort area and it is probable that no more serious gathering of this group has ever been recorded. Held under the auspices of the Southeastern Section of the ASCE and guided by the efficient hands of Dean N. W. Dougherty and his selected committees nothing was left undone to make this gathering both enjoyable and profitable." He further stated that "the reports offered here have been good ones and much study has been expended! The conclusions of the Committee from the Chemical Engineering division is a sound one. Let these reports be considered as progress reports and continue the Committees for another year with instruction to expand the studies to cover all Institutions listed by the Engineers Council for Professional Development as "approved". Finally, let there be another work shop period scheduled for the summer or fall of 1950 for the purpose of preliminary reports from these Committees and a serious discussion of any recommendations made in them."



The chairman then called on Prof. Howard P. Emerson, Head, Department of Industrial Engineering, University of Tennessee to make a statement concerning Industrial Engineering. He stated that "the Industrial Engineering Curriculum also offers suggestions for courses to be included in the common core of all engineers' training. One of these is Statistical Quality Control. A committee of the American Society for Quality Control has recommended that all engineering students get one year of Statistics and Quality Control courses. All engineers who design experiments and do research need to use statistical techniques. One third of all engineers are doing administrative-management work. Some companies look for engineering graduates to go directly into supervisory jobs. A course in Industrial Engineering and Management, such as is now taken by all Industrial Engineering students and many Mechanical Engineering students, provides training in the methods of scientific management for those who will deal with men as well as machines. Courses in Engineering Economy have been recommended in reports of other curriculum committees. Courses in engineering economics help students in considering costs and the economics of proposed projects. Such courses cover important considerations other than technical which enter into the success or failure of an industrial enterprise. The reference to geo-politics in one of our meetings suggests that all engineers should know what the natural resources of their state, region, and country are. If they are to contribute to planning for national defense or war time procurement of the basic raw materials and sources of energy needed by industries, the economic and international aspects of each are important. A course in Industrial Resources can provide necessary background. These are some of the courses in Industrial Engineering curricula which are suggested for consideration in the common core of engineering training."

Following the presentation of the reports there was considerable discussion. The following took part in the discussion:

Professor Brown, University of Tennessee  
Professor Barnes, Virginia Polytechnic Institute  
Professor Mantell, University of Miami  
Doctor Mergen, University of Florida  
Professor Meyer, Duke University  
Dean Hall, Duke University  
Dean Lassalle, Louisiana State University  
Doctor Vail, Duke University  
Professor Ebaugh, University of Florida  
Professor Bryan, University of Alabama  
Dean Earle, Clemson College  
Dean Gudworth, University of Alabama

Dean J. E. Harnum made the following motion which was seconded and passed;

- (a) That the Southeastern Section of ASEE express its appreciation to the committees on curricula for their splendid work as reported to this meeting;
- (b) That these same committees or similar committees be appointed as sub-committees of a main committee on Engineering Curricula, also to be appointed as committees of this Section to continue their studies;
- (c) That the faculties of the schools represented in the Section study the reports and be prepared to discuss them at a future meeting and
- (d) That the further discussion of curricula design be a major topic of and on the program of the next meeting of the Section or at a summer conference if one should be held this year.

Prof. C. A. Newton, Associate Professor of Engineering Drawing, University of Tennessee made the following statement to the group: "For nearly a year, we worked with a committee representing the Drawing Department and all of our degree-granting departments. We have neither "straight-jacketed" our courses nor frozen our design. We were not concerned so much with "which text to use" or "how many credit hours" as we were with the "function of graphics in the education of an engineer". We have not been so concerned with the separate subjects of Engineering Drawing and Descriptive Geometry as we have been with the contribution of these subjects to the total picture. We have explored the possibility that there are valuable concepts in Descriptive Geometry that need to be introduced quite early in the basic drawing course. We recognize the importance of freehand technical sketching at all levels. We are wary to the idea that the skill of good line work and lettering should not decline after the Drawing courses have been passed but should at least continue at the same level. As yet we have not completed our studies. In fact, our department is always studying something. We believe that any contribution we make will be the greater by exchanging information and working with other institutions of the Southeast where the advancement of Engineering Education is a moving force. To this end, and because graphics is so vital to the technical competence of all engineers, and because improvements in the content and teaching of graphics are more likely to be made by people directly concerned with that subject, I offer the following motion:

"I move, that at a subsequent meeting or meetings there shall be a place on the program for the teachers of graphics to report on the place of that subject in the core of Engineering Education."

The above motion was seconded and passed.

The Chairman then called the business meeting to order and Dean Dougherty stated he had received many letters requesting that we have another meeting this summer at Fontana Dam, North Carolina.

It was moved, seconded and passed that we have a summer meeting at Fontana Dam with Dean Dougherty in charge of arrangements and the program.

Doctor Armsby told about the meeting of ASSE to be held at the University of Maryland on May 8, on improvement of engineering teaching and extended an invitation to the group to attend it.

Dean Robert L. Sussalt, Secretary-Treasurer then read the minutes of the meeting which was held at the University of South Carolina.

There is attached as a part of the minutes a financial statement covering receipts and disbursements (see exhibit A).

Dean S. B. Earle, Chairman of the Committee on Resolutions presented the report of his committee which was seconded and passed:

"The Sixteenth Annual Meeting of the Southeastern Section of the American Society for Engineering Education held at Roanoke and Blacksburg, Va., under the sponsorship of the Virginia Polytechnic Institute, has been a high point in the history of the Section.

"Hospitality, organization, arrangement of the programs for the regular sessions, as well as the entertainment of the ladies has been of high order. It has been heartily enjoyed and sincerely appreciated by all.

"Therefore be it resolved -that this Section express its appreciation to the Administration and especially to Dean Earle Norris, and to the Staff, and to all the Local Committees in particular, of the Virginia Polytechnic Institute for the splendid arrangements, the delicious luncheon, and the many other thoughtful and helpful courtesies which made this meeting so successful.

"Be it further resolved -that all the speakers be complimented on their excellent papers and addresses, and their effective presentation.

"Be it further resolved -that our appreciation be expressed to Dean Mary Phlegar Smith and Bessie Randolph of Hollins College for the courtesy extended the ladies attending the Southeastern Section of the American Society for Engineering Education.

"Be it resolved further -that appreciation be expressed to the Hotel Roanoke for the efficient service and well ordered arrangements for our meetings, and for the comfort of all those attending the Sixteenth Annual Meeting of the Southeastern Section of the American Society for Engineering Education."

Dean L. J. Lassalle, Chairman of the Committee on Place of Meeting presented the report of his committee which was seconded and passed:

"That the next annual meeting of the Southeastern Section be held somewhere in Mississippi with Mississippi State College and the University of Mississippi as joint hosts."

Dean Flinsch of Mississippi State College stated that he is happy that the group will come to Mississippi and that he will do everything possible to make the meeting a success.

Chairman Haynes then thanked the Section for the splendid cooperation he had received from everyone.

Dean J. E. Hannum, Chairman, Committee on Nominations reported for his committee which was seconded and passed as follows:

"Chairman: Dean E. B. Norris, Virginia Polytechnic Institute  
Vice Chairman: Dean Robert L. Sumwalt, University of South Carolina  
Secretary-Treasurer: Prof. Bruce Rayer, Vanderbilt University  
Representative of Section on Advisory Council on Mathematics in  
business, industry, sciences and engineering:  
Dr. Charles R. Vail, Duke University"

Dean Norris took the chair and thanked the Section for the honor which had been conferred upon him.

During the meetings the ladies were entertained at several delightful functions which had been arranged by the local committee.

There were 195 persons in attendance.

A copy of the program is attached as a part of the minutes.

The meeting adjourned at 12:00 noon



SOUTHEASTERN SECTION  
AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
FINANCIAL STATEMENT

Receipts

Balance on hand 4/28/49	\$ 75.66
Dues received (23 @ \$5.00)	115.00
Total	\$ 190.66

Disbursements

To: Mrs. R. M. Littlejohn for typing minutes	\$ 5.00
Cash for stamps & mimeographing	5.90
Cash for stamps	5.00
Farrell Printing Company for printing programs	39.00
Bank service charges	4.00
Mrs. Paul Ramsing for stenographic services	35.00
Virginia Polytechnic Institute for meeting expenses	16.50
Total	\$ 110.40

Balance on hand: \$ 80.26

NOTE:

Dues for 1950 collected from following institutions:

University of Louisville	University of Alabama
University of Tennessee	Vanderbilt University
Virginia Polytechnic Inst.	University of Mississippi
University of Virginia	University of Kentucky
Virginia Military Institute	Alabama Polytechnic Institute
Duke University	University of Miami
N. C. State College	Louisiana Polytechnic Institute
University of South Carolina	Clemson College
The Citadel	University of Florida
Tulane University	Tennessee Polytechnic Institute
Georgia Institute of Technology	Southwestern Louisiana Institute
Mississippi State College	Louisiana State University (paid in 1949 for 1950)

Robert L. Sumwalt  
Secretary-Treasurer

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Cash for stamps & mimeographing	5.90
Cash for stamps	5.00
Farrell Printing Company for printing programs	39.00
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Mrs. Paul Ramsing for stenographic services	35.00
Virginia Polytechnic Institute for meeting expenses	16.50
Total	\$ 110.40

Balance on hand: \$ 80.26

NOTE:

Dues for 1950 collected from following institutions:

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The Citadel	University of Florida
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REGISTRATION  
Sixteenth Annual Meeting

Southeastern Section and the Research Branch of the

AMERICAN SOCIETY FOR ENGINEERING EDUCATION  
Virginia Polytechnic Institute  
Blacksburg, Virginia  
April 21, 1950

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AMERICAN SOCIETY FOR ENGINEERING EDUCATION

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