

MINUTES OF THE ELEVENTH ANNUAL MEETING OF THE S.E. SECTION
OF THE SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION
HELD IN ATLANTA GA., APRIL 29th, 1944.

Georgia Institute of Technology was host to the South Eastern Section of S.P.E.E. at their eleventh annual meeting on April 29th, 1944.

The morning session was called to order by the Chairman, Dean F.L. Wilkinson, of the University of Louisville. The minutes of the tenth annual meeting were read and approved.

It was moved by Dean Dougherty of the University of Tenn. that a research division be begun in the S.E. Section. Motion seconded and approved.

The chair then introduced Dean H.P. Hammond of Pennsylvania State College who gave the section a preview of his committee's report on Engineering Education after the War. The committee made the following recommendations:

A. For Immediate Problems.

1. The upgrading of standards for entrance into engineering courses.
2. The abandonment of the accelerated program as soon as possible.
3. Better physical training programs.
4. More general availability of loan funds.
5. Raising of faculty standards.

B. General Principles.

1. That approximately one-sixth of the time of the four year course be devoted to Humanistic-Social studies under the direct supervision of the engineering departments.
2. Adherence to the four year program but promotion of greater opportunity for graduate study.
3. Raising of the general level of engineering education at the top by the increase in graduate study.
4. More training for professional jobs.
5. Expansion of courses in Technical Institutes and recognition of these courses.

6. That colleges should not attempt sub-professional courses on the campus.

A brief resume of the discussion and questions is given herewith:

Dean Davis: Would it be proper for a university to operate a separate division as a Technical Institute or should this work be under a separate agency?

Dean Hammond: An extension division would be good. E.S.P.D. now advocates recognition of the technical institutes such as Extension Divisions, Junior Colleges, Proprietary Schools, and schools operated by industry. Technical Insts. should be under sound auspices and not placed under vocational schools. They should also be given full recognition for what they are.

Dean Robert: Many of our graduates do sub professional work in industry. Would the recognition of technical institutes remedy this?

Dean Hammond: No. Many of our graduate now handle routine details that could be handled by girls with ten weeks training.

Prof. Morton: Will you be more specific as to what is meant by humanistic-social courses?

Dean Hammond: English, economics, history, and government, and three units of a general cultural elective.

Prof. Morton: Should we use the established courses in these subjects?

Dean Hammond: No. Separate courses should be carefully planned and under the direct supervision of the engineering department. The attitude of these courses must be considered.

Prof. Camp: Would the student continue his graduate work in the same school?

Dean Hammond: This depends on the school and the student. It would be preferable to have a migration of students.

Dean Weil: We should make a sharp distinction between men from Technical institutes and men with college degrees. That this may be done we must raise our entire professional level.

Prof. Baskerville: The committee recommends more humanistic courses but also recommends retaining the four year program. How can this be done?

Dean Hammond: The committee recommends less subject matter in four years, pushing more of the advanced work into the post graduate work. The four year course has proved adequate for design function but has not been adequate for research function.

At the conclusion of the discussion Dean Wilkinson introduced Prof. Henika of Georgia School of Technology, who was still teaching at 88 years of age. An example of how professors of engineering should stick to their work.

The morning session was then adjourned for lunch.

After a very delightful luncheon Prof. D.W. Dutton of Georgia School of Technology, presiding officer, introduced Dr. M.L. Brittain, president of Georgia School of Technology who welcomed the section to Atlanta and Georgia School of Technology.

Mr. Carl H. Wolf, President of Atlanta Light and Power Company, spoke to the section on the subject "Education and Industry". He pointed out that the south to-day is the number one opportunity and that the way to develop that opportunity is for education and industry to join as a team. Colleges, he said, had put too much stress on training when the stress should have been on education. It is up to industry to teach people what to think but the colleges must first teach them how to think. He further recommended that the south should go further into research. The colleges, he said, could give the leaven which would encourage industrial firms to a more thorough job of research. He believed that education and industry should meet on a more cooperative basis; the professors to come into industry and study methods and the industrialists take the place of the professors in college. In this way, he thought, a better understanding of the needs of both education and industry would be gained. Many problems, such as funds for research, what to teach, how to teach it, and student aid could all be solved when education and industry join as a team to build a better and stronger southland.

AFTERNOON SESSION: DEAN L.L. PATTERSON, VICE-CHAIRMAN, presiding.

The subject discussed at the afternoon session was "What Can We Do To Implement the S.P.E.E. Committee Report and How May Its Recommendation be Put Into Action". Dean N.W. Dougherty of University of Tenn. lead in the discussion and made the following recommendations:

1. We must recognize the limitations of memory of the students.
2. We should undertake to tie more of the instruction to the students past experiences.
3. We should work out a better method of evaluating the student's gain in education than by the course credit method.

4. In the Scientific-Technological stem we should shy away from so much detail and stress principles.
5. We should not limit ourselves to the standard course for the Humanistic-social stem but should work out new course content and new approaches to the general subjects.
6. We should have unity of program. Teachers and students alike must be fully aware of the final goal.
7. We must endeavor to cause growth in the creative ability of the student by requiring solution of problems of increasing length and complexity during the four years.
8. We must have inspired instruction using approved techniques. Here, we would do well to profit by using the techniques worked out by departments of education.
9. Teachers must realize that four years of college is but the beginning of a professional career and that they are the guide posts along the way.

Prof. A.G. Holmes, Head of Mechanical Engineering Department, Mississippi State College was the next speaker and expressed the following ideas:

1. That many of the post war problems must be left to post war solutions.
2. That war has hurt rather than helped the methods of teaching since most war time teaching was training for a specific job.
3. It will be a difficult task to get teachers trained along Humanistic Social lines who will inspire engineering students.

In conclusion Prof. Holmes made the following recommendations:

1. More and better use of well planned visual aids.
2. Comprehensive examinations required of graduates of all schools. These to be given by the same agency and graded by a group and not by an individual.
3. Give greater care to the selection of teachers, subjects to be taught and to time devoted to each subject.
4. Emphasize to all people the difference in engineering education and vocational or technical training.

Dr. Roy S. King, Head, Department of Mechanical Engineering, Georgia School of Technology followed Prof. Holmes in discussion of the report with the following comments:

1. To get better results from the high schools a closer cooperation must be had between the colleges and high schools.

2. A well prepared freshman can accomplish the present four year curriculum but a poorly prepared freshman cannot.
3. Faculties should be rehabilitated and only teachers who can teach should be selected.
4. Classes on how to teach should be given to younger faculty members by those who can teach.
5. The time spent on outside activities by college professors should be curtailed and should be limited to the subjects taught.

Following Dr. King's remarks the discussion was opened to the floor. The high lights of that discussion follows:

Dr. L.E. Grinter, of Illinois Inst. of Tech. There should be a greater tendency for the various departments to get together to plan social-humanistic courses. Teachers of English, history, and the like should be able to inspire engineering students.

Dean Dougherty: English departments design courses looking to giving more time in English and engineering students are dissatisfied with what they get. We must have stimulating teachers of humanistics and they will in turn stimulate the student.

Dean Earle: More hours in English, economics, and the like will not do the job. Mathematics not being taught in high schools is the freshman's difficulty. Freshmen fail in trigonometry for they know no algebra. If we insist that the high schools make mathematics a required course they will do so.

Prof. D.J. Mack: Asked if any college went back to the high schools to discover the trouble.

Dean Earle: Some high schools have improved after a request was made that they get better results.

Dr. King: At Georgia Tech. failures are checked for some high schools and a report is made to the school of these failing students. There is always improvement after these reports.

Col. LeTellier: If more emphasis is placed on humanistic content then less emphasis will be placed on courses now given in engineering. Our first duty is to produce engineers. He also asked if there had been a curriculum worked out according to the recommendations of the committee.

Dean Wilkinson: The committee is now making studies of such a curriculum and it is felt that if the recommendations of the committee are carried out that it will produce a good job.

Dean Dougherty: The committee is also studying methods of testing to determine the ability of the student to continue in engineering. Some time must be spent, however, in learning to live in the community.

At the conclusion of the discussion Dean Wilkinson read a message from President R.E. Doherty in which he stated that he regretted that he was unable to meet with the section.

The meeting was adjourned to take up the business of the year. The following reports were made:

The committee on Nominations, Dean S.B. Earle Chm., N.C. Ebaugh and Dean Hannum recommended the election of the following officers:

For Chairman: Dean L.L. Patterson, Mississippi State College.

For V-Chairman: Dean Joseph Weil, University of Florida.

For Secretary: Prof H.G. Haynes, The Citadel.

Acceptance of the recommendation of the committee was moved, seconded, and approved.

Committee on place of meeting and resolution, Dean G.J. Davis, Chm., Dean D.V. Terrell, and Prof. R.M. Bearts made the following recommendations:

That due to war conditions the meeting be held in the central area and that the invitation to hold the next meeting at Vanderbilt be accepted.

Recommendation approved.

The following resolution of the committee was approved by the section:

"Whereas we, the members of the Southeastern Section of S.P.E.E., have been the guests of the Georgia School of Technology during our eleventh annual meeting and have been accorded unexcelled hospitality, therefore, be it resolved:

1. That we deeply appreciate the courtesies extended to us by the Georgia School of Technology.
2. That we thank the officers of the section and the committees on arrangements for the excellent, stimulating program which they so ably arranged.
3. That we thank the speakers for presenting to us their views in such interesting and informative manners.
4. That these resolutions be spread on the minutes of this meeting and a copy of them be sent to the president of the Georgia School of Technology".

Upon motion from the floor the eleventh annual meeting of the S.E. Section of S.P.E.E. was adjourned.

Members present 79

Visitors 8

Total attendance 87.

H. Gale Haynes, Secretary.

REGISTRATION ELEVENTH ANNUAL MEETING OF
SOUTH EASTERN SECTION OF S.P.E.E.

ALABAMA

UNIVERSITY OF ALABAMA

Bryan, Colgan H.
Coons, K.W.
Cudworth, J.R.
Dahlene, Oscar
Davis, Geo. J.

Dunstan, G.H.
Faircloth, J.M.
Gaylord, Charles
Johnson, G.C.K.
Shank, D.H.

ALABAMA POLYTECHNIC INSTITUTE

Hannum, J.E.
Hill, W.W.
Hixon, Chas. R.

Honour, Wilfred M.
Lowe, Thomas
Steere, R.M.

FLORIDA

UNIVERSITY OF FLORIDA

Morgan, Ralph A.

Weil, Joseph

GEORGIA

GEORGIA SCHOOL OF TECHNOLOGY

Allen, R.L.
Brittain, M.L.
Case, A.A.
Daniel, Jno. L.
Dasher, B.J.
Dutton, D.W.
Field, Floyd
Henika, J.H.
Holland, A.D.

Honnell, M.A.
King, R.S.
Mason, J.W.
McDaniel, J.E.
Rosselot, G.A.
Savant, D.P.
Trotter, R.A.
Weber, H.S.
Williams, G.K.

KENTUCKY

UNIVERSITY OF KENTUCKY

Chambers, A.L.
Nollau, Louis

Shaver, R.E.
Terrell, D.V.

UNIVERSITY OF LOUISVILLE

Ernst, R.O.
Houchens, John M.

Trospers, Ralph S.
Wilkinson, F.L. Jr.

LOUISIANA

LOUISIANA STATE UNIVERSITY

Cox, Glen N.

TULANE UNIVERSITY

Hill, Arthur M.

Robert, James M.

SOUTHWESTERN LA. INSTITUTE

Hughes, George G. Sr.
Mason, H.R.

zurBurg, F.W.

MISSISSIPPI

UNIVERSITY OF MISSISSIPPI

Anderson, Frank

Johnson, Lee H.

MISSISSIPPI STATE COLLEGE

Holmes, A.G.

Littlejohn, W.W.

Patterson, L.L.

NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE

Fountain, A.M.

Mumford, D.G.

Ruggles, Edward W.

Stiemke, Robert E.

Vaughn, L.L.

DUKE UNIVERSITY

Brower, Alfred S.

Hall, William H.

Meier, Otto Jr.

SOUTH CAROLINA

UNIVERSITY OF SOUTH CAROLINA

Sumwalt, R.L.

CLEMSON COLLEGE

Curtis D.D.

Earle, S.B.

Glenn, H.E.

Lewis, A.D.

Long, Jim T.

Norman, C.C.

Shigley, J.E.

Trively, I.A.

THE CI TADEL

Clement, William B.

Haynes, H.G.

LeTellier, L.S.

TENNESSEE

UNIVERSITY OF TENNESSEE

Baskerville, W.H.

Bird, John M.

Boarts, R.M.

Camp, Cecil S.

Dougherty, N.W.

Granger, A.T.

Mack, David, J.

Morton, Roscoe W.

Plummer, Clayton, R.

Tarboux, J.G.

VANDERBILT UNIVERSITY

Lewis, Fred J.

Litkenhous, Edw. E.

VIRGINIA

UNIVERSITY OF VIRGINIA

VIRGINIA POLYTECHNIC INSTITUTE

Webb, Lewis

VIRGINIA MILITARY INSTITUTE

Marr, R.A.

Emerson, Walter
Grinter, L.E.
Hammond, Harry P.
Gubitz, Albert C.
MacQuigg, C.E.
Hynes, Robert D.
Wolf, Carl H.

GUESTS

E.S.M.W.T.
Illinois Tech.
Penn. State College
Ohio University
Ohio State University
University of Cincinnati
Pres. Atlanta Light and
Power Co.

Washington, D.C.
Chicago, Ill.
State College, Pa.
Athens, Ohio
Columbus, Ohio
Cincinnati, Ohio
Atlanta, Ga.