# The Knowledge Bank at The Ohio State University Ohio State Engineer

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# DEPARTMENTAL NEWS

#### A. S. C. E.

The evening of the first day of school, the student chapter of the American Society of Civil Engineers held a smoker and funfest in Brown Hall. After meeting in room 109, the group proceeded directly to the instrument room where each man received a package of artificial paper money, a corncob pipe and a book of matches as he entered. A large can of tobacco was in the center of the room for all to fill their pipes freely.

The entertainment of the evening was in the form of a gambling casino. Bingo, chuckoluck, roulette, poker, crap, and several other games of chance were played. At the end of the evening's play the two men having amassed the greatest fortune were awarded the grand prize of a brick and a rubber baby doll.

Cider, doughnuts, and cheesecrackers were served to all present.

The first dinner meeting of the year was held in Pomerene Refectory on October 15. During the course of the business meeting, Roy Underwood, senior representative of the Engineers Council, reported that the Council was desirous of forming a new campus political party, and he asked for the support of the A. S. C. E.

Bill Lersch and Bill Apple were elected as official voting delegates for the Ohio State Chapter at the meeting of the North Central Conference of student chapters in Cincinnati on October 16-17, 1940.

Samuel S. Wyer, consulting engineer, gave an interesting and very dynamic talk on the subject "How to Make Private Enterprise Work."

Meeting in conjunction with its patent organization, the local student chapter of the American Society of Civil Engineers took part in the 1940 fall regional conference of student chapters in Cincinnati, October 16-17. Over 150 students from Purdue, Carnegie Tech, Clemson, Pittsburgh, West Virginia, Tennessee, Louisville, Ohio State, Case, Dayton, Wisconsin, Michigan State, George Washington, and Virginia Military Institute met at the Netherland Plaza Hotel, Wednesday, October 16, for the opening session. The local chapter was represented by a delegation of nine.

Following a luncheon at the hotel, the students were addressed by Mr. E. M. Hastings, chief engineer of the Richmond, Fredericksburg, and Potomac Railroad, on "What Lies Ahead in Engineering," and by Prof. C. T. Morris of Ohio State, "A Reconnaisance." An impromptu exhortation by Dr. Daniel Webster Mead of Wisconsin, was warmly received by the delegates.

The meeting was followed by a dinner and dance at the Student Union Building. The engineer delegates attended the dance in a body and were supplemented by dormitory men. The cadets of Clemson College and Virginia Military Institute, with their fancy uniforms, gold braid, purple sashes, and southern accents attracted attention.

Thursday's program consisted of a continuation of the previous day's meeting, featuring the reading of outstanding student papers. Charles R. Nuckolls, University of Cincinnati, was awarded first prize for "Land Acquisition Mapping from Aerial Photographs as Used by the Tennessee Valley Authority." Louis F. Birklee, Louisville University, won second prize for a report on "The U. S. Geological Survey."

Following a luncheon at the Union Building the convention was closed with a trip to the Cincinnati Water Works.

The scene of the next convention will be Pittsburgh and will take place in the Spring.

Robert A. Alton, consulting engineer, and superintendent of the Columbus Sewage Treatment plant, gave the address at the second dinner meeting Tuesday, November 5, in Pomerene. He spoke on "The Design of a Sewage Treatment Plant." He described very completely the procedure used in designing the Columbus plant. There were six separate designs involved—the sanitary, hydraulic, mechanical, structural, electrical, and architectural. Mr. Alton also described some difficulties encountered on the job—besides giving some very interesting sidelights.

Baird Heffron was unanimously elected to the office of Junior Representative on the Engineers' Council.

Norman Bradstock and Paul Stamm were elected to Tau Beta Pi, National Engineering Honorary.

Officers for the current year are: Bill Apple—President. Bill Lersch—Secretary-Treasurer. Roger Sunbury—Vice President. Norman Bradstock—Registrar.

#### A. S. M. E.

One of the American Society of Mechanical Engineers' favorite speakers was again invited to be present at the regular Friday afternoon meeting, October 18. Both movies and slides aided Professor Davis in giving his highly interesting talk on infra-red and slow motion photography. Also at this time, Robert Fisher was elected as the mechanical engineers' junior representative to the Engineers' Council.



The A.S.M.E. and A.I.E.E. Dance

#### A. S. M. E.—A. I. E. E. DANCE

As the chimes of Orton Hall tolled out the hour of nine o'clock on the evening of Saturday, November 16, strands of sweet music drifted from the softly lighted ballroom of Neil Hall. It was the M. E. double E. dance. For weeks the A.S.M.E., A.I.E.E. meetings have been having a show of hands—how many would support the dance, how much should be charged? The dance itself indicated the correctness with which these questions were answered. Support was forthcoming from both departments; a crowd of over a hundred couples well represented both the M. E. and the E. E. departments. Much of the credit for the success of the dance should go to the officers of the two organizations and to the appointed program committees.

Chaperones for the affair were Professor S. R. Beitler and wife, Professor E. E. Kimberly and wife, Mr. Kunze of the E. E. Department and Miss Fismer, secretary of the E. E. Department.

Much favorable criticism was received from both faculty and students and it is hoped that the dance will become a yearly tradition.

#### A. I. M. E.

The A. I. M. E. hay-ride was held Fri. evening, Nov. 15, at Krebs farm in Westerville. Although cold weather attempted to dampen the ardor of the couples, an enjoyable evening was spent by all. The Lord Hall men certainly turned out with some fine looking girls, and should be praised.

Sigma Gamma Epsilon, Mining, Metallurgy, Ceramic and Geology fraternity, in keeping with its traditions, has inaugurated the year with plans for a series of social and educational events.

The main social events during the fall quarter were a dance, and later in the quarter, a dinner dance. The first dance was held at Williams Grill in Westerville. The dinner dance was held at the Virginia Hotel. Both affairs were huge successes.

A series of interesting speakers are on tap to give the members an inside view of the professional engineer.

The officers this year are: President, Geo. P. Michalos. Treasurer, J. K. Folk. Secretary, Joe Moran.



Miss Fismer and Mr. Kunze at the A.S.M.E. and A.I.E.E. Dance

#### S. S. I. E.

Proof of the lively program of the previous season was the large turnout of the first meeting of the Student Society of Industrial Engineers. This initial meeting, led ably by President Enrie Oehling, was guided quickly and efficiently to an ending consisting of cider, doughnuts and movies of the last Spring Quarter picnic.

There were, however, a variety of subjects discussed by the members and a talk by Chief during the meeting. (And, of course, that story by the inimitable Professor Rickly.) President Ernie introduced himself and the other officers of the organization, and selected the necessary committees to plan the forthcoming dinner meeting and dance. Treasurer Dwight Hughes, with greedy eye, antagonized the members for dues, and, duly and similarly, inducted the new members. Chief then introduced the new members of the faculty. These were Harry Zadra, Joe Walkup and Wesley Will.

To you new men, Chief John Younger, is the head of the Industrial Engineering Department, and, as such, is capable, extremely well-liked, and highly respected by the students.

This first meeting was brought to a close, reluctantly, by the time and by the ultimate lack of refreshments.

A special meeting at a later date was held in one of the picturesque shops in the I. E. Building to decide if the "double S" I. E. should affiliate with the American Society of Tool Engineers. Since this is an important step and should be considered carefully, a capable committee was chosen to look into the whys and wherefores of such an affiliation. Decisive action is expected of this committee. The climax of this meeting was the acknowledgment of the appointment of Joe Walkup to the Faculty Advisory Board of the Society.

With these two meetings, a swelling of the roster with new men, (and of the Treasury with, not new but negotiable, funds) and plans for future activities, a successful season has gathered into full swing.

#### S. A. M. E.

In the first meeting of the Society of American Military Engineers of the Ohio State University of this year, Sergeant Pipher presented motion pictures he had taken this past year at the R.O.T.C. summer camp at Fort Knox, Kentucky.

The pictures illustrated the camp life of the cadets, the recreation offered by the camp, and aerial views of the camp in addition to the military activities.

In this last classification were the activities of the cadets in building a ponton bridge across a flood-swollen river. This bridge was built near a "bivouac" camp which was also set up by the cadet engineers.

The climax of the pictures were scenes from the

mock warfare presented for the benefit of the students. This consisted first of an inspection of the organization and equipment of the "Seventh Engineers" which is a part of one of the new streamlined triangular divisions. Captain Seeman, Engineer instructor of the R.O.T.C. corps here for the past several years, was associated with this unit at that time.

The action of the mock warfare consisted of a tank attack in the conjunction with the use of gas. The activity of the artillery was demonstrated by the firing of tracer shells.

The second meeting offered pictures taken by Colonel H. C. K. Muhlenberg who is now the Air Officer of the Fifth Corps Area. He had motion pictures of the Hawaiian Islands taken from the air, the land, and the sea. They dealt largely with the scenic beauty of the islands, and activities characteristic of Hawaii. Since most of the pictures were in color, they did this quite well.

Of particular interest to those present were the scenes of Honolulu at Christmas (both night and day), the volcanic craters, the surf riding, the variety of flowers on the islands, the genuine hula dance, and slow motion pictures of porpoises playing about the ship. The two and a quarter hours of pictures presented a rather complete description of Hawaii.

For the meeting of November 14, Lieutenant Colonel R. L. Smith, Engineer of the Fifth Corps Area, was secured to discuss the subject of national defense and the part the R.O.T.C. advanced student may play in it.

#### **KERAMOS**

Keramos opened a new year with an ambitious program of work. Meeting at the Dutch Tavern on Monday, October 21, the program of activities was planned. The tunnel kiln survey, which was started last year, will be pushed to a conclusion this year. All of the data from the questionaires returned by the operators of tunnel kilns will be classified and correlated. This material will be mimeographed and made available to those desiring it. The mimeographing and distribution of the white wares and glaze and color abstracts will be continued this year. Record sheets of all graduating seniors will be compiled and typed by Keramos members.

Using a spectacular demonstration of pouring molten glass, an inspection of machinery and kilns, and as a main drawing card, hot dogs and coffee, the annual Keramos Open House served to acquaint the underclassmen with the history, purpose, and values of Keramos membership. Professors Watts, Carruthers, and King, all in the Department of Ceramic Engineering, and Dr. McCaughey, Department of Minerology, were the speakers of the evening. Ross Purdy, Secretary of the American Ceramic Society was among the guests present.

#### THE OHIO STATE RADIO CLUB

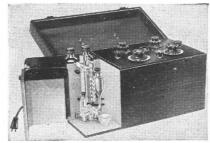
With a near-record membership of 23, the Ohio State Radio Club this year shows indications of becoming one of the most active groups in the club's history. Primarily an organization for the promotion of amateur radio activities on the campus, the radio club under the leadership of President George H. Gunnoe, W8MEK; Vice-President William M. Hildebrand, W8LOF; Secretary-Treasurer Reino I. Wilbeck, W8LZJ; and Technician Wilbur F. Tipton, W8OPT; meets formally on alternate Monday evenings at seven o'clock, usually in the communications laboratory. On the other Monday evenings during the school year, informal meetings are held at the W8LT "shack" under the old WOSU towers. Each Wednesday at 7 p. m. instruction in the International Morse Code is given at the shack for university students desiring to obtain amateur radio operator ("ham") licenses. Radio enthusiasts not yet acquainted with the radio club are invited to attend any of the meetings.

Hugh A. Turnbull, W2CTT, a graduate student from the University of West Virginia, discussed facsimile transmission and reception at the October 28 meeting. The functions of facsimile apparatus were explained and several samples of experimental "broadcasts" which Mr. Turnbull had received were shown. Mr. Turnbull also told of his experiences in working with facsimile at the New York World's Fair.

The policy of having two dinner-meetings per quarter is traditional with the radio club. On November 18 in Pomerene Refectory the first "masticate and modulate" session of the year was held. A new member of the English Department, William Van O'Conner, provided the entertainment. Mr. Van O'Conner recently obtained his master's degree in English from Columbia University, using "Women in Literature" as the subject for his thesis.

At the present time W8LT sports a 600 watt, phonec.w. transmitter capable of operation on the 20, 40 and 80 meter bands. Nearing completion are a 20-40-80 meter c.w. "rig" with a 35T in the final and a 5 and 10 meter phone outfit with a pair of push-pull 35T's in the final amplifier. The former WKRC transmitter, inherited last year by the university's electrical engineering department, is being revamped for 160 meter phone operation.

Since the European war has led the Federal Communications Commission to ban contacts with foreign stations, little in the line of DX (distance) has been worked recently at W8LT. Contacts within the country and with stations in government possessions, however, are as numerous as they ever were. QSO's (contacts) with Honolulu and with Puerto Rico have been logged recently.





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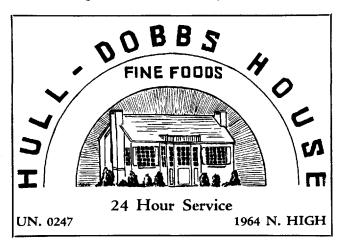
After a smoker attended by the candidates for membership, Tau Beta Pi chose the six honor juniors and a number of seniors to be initiated. The honor juniors were Evan L. Jones, Clifford Heer, Norman Bradstock, Clyde Kearns, Clyde Murtaugh, and John Semmelman.

The seniors selected were Vernon Belt, Donald Guentert, Daugherty Hecox, Wayne Howard, Douglas Kramer, Eugene Chosy, Charles Harrod, Paul Stamm, Arlington Mallery, Harry Kezerta, John Rex, J. Allen Pierce, Victor Filimon, Robert Roshong, William Jacques.

In addition to this smoker held on October 30, the organization has had a dinner meeting on October 9, at which John Newman presented a "Culture Test" which was to be compared with the results secured in similar groups in other colleges. At the meeting of October 23, James Robinson and John Newman, delegates to the National Tau Beta Pi Convention, reported upon the convention. Several meetings have been planned for the remainder of the quarter.

## ENGINEERS' COUNCIL AND TEXNIKOI

The Engineers' Council and Texnikoi have been pulling together for the past month to organize and promote the new campus party, the All Campus Combine. With Bob Salter of Engineers' Council and Jack Zimmerman of Texnikoi as the co-chairmen representing the Engineering College, the new party rapidly formed and became a major organization over night. Obtaining the active cooperation of all the engineering departments was part of the job of the two groups; the results of the campaign show how well this task was accomplished. Jim Robinson, President of Texnikoi and a member of Engineers' Council, was nominated for senior class president by the All Campus Combine. When the excitement of the campaign dies down, the two societies will settle down to their tasks of staging a successful Engineers' Prom which will be held during the Winter Quarter in the Men's Gymnasium.



#### CIVILIAN PILOT TRAINING COURSE

#### By Walter Hendricks, Welding Engr. '43

The Civilian Pilot Training course is designed to train interested students to be licensed private pilots with the fundamental background necessary for further training.

The training given in the course is more than merely learning to fly. Ground school is an important element of the work and consists of three parts: meteorology, air navigation, and miscellaneous.

The flying course consists of at least thirty-five hours of flying time. The thirty-five hours are divided into four groups. Group A is eight to ten hours dual time before soloing. Group B consists of five hours of mixed dual and solo time, in which the student obtains more confidence and improves his ability. Group C consists of eleven hours practice flying, which are devoted to mixed time, part dual and part solo. Group D consists of eleven hours and consists of two cross country trips, one dual and one solo, and practice tests such as the student will receive from the government inspectors before becoming a private pilot.

The reasons for entering the Civilian Pilot Training course are varied. Some enter because they want to be eligible for the air corps in case of war. Some enter because they are interested in flying and like the idea of learning at small expense. Others enter because they want to be prepared to help the country if needed; still others feel that it will help them in their work.

The distribution of the C. P. T. students is best shown by a chart. The chart shows the number of students in each college and indicates the number of graduates and students not in college who are taking the course.

	No. in C.P.T.	Graduates	Not Entered
College	1		1
Engineering	18	2	3
Education	8		2
Fine Arts	2	1	1
Commerce	10		2
Arts	8		1
Law	1		
Agriculture	2		1
Total	49	3	10

The chart shows that the engineers predominate in the course, and since the forty-nine students are composed of forty-four boys and five girls the engineers get to see more girls than usual.

Primary information about the course may be had by inquiring at the office of the entrance board. To be eligible for the course students must have at least a sophomore rating if attending school or if not attending school must have completed the sophomore year. Physical requirements are quite strict. The course is completed in one quarter under the present arrangement. Students taking the course find it necessary to cut their schedules to a certain extent. The average number of hours carried by the students taking the course this fall is eleven or more. The average cumulative point-hour ratio of the students taking the course is 2.17.

The writer is taking the course and finds it quite interesting and instructive. A favorite maneuver at the present time is the tailspin—and thereby hangs a tale. One of the students doing a tailspin solo didn't pull out of the spin till he had done twice as many as necessary. Reliable information has it that the instructor was in a tailspin too.

#### A. I. E. E.

The student branch of the American Institute of Electrical Engineers held its first get-together of the year on the evening of October 10, in Room 100 of the Communications Building. Senior Vice-Chairman Bob Berger presided in the absence of President Charles Wood and gave a short preview of plans for the functioning of the branch for the school year. Mr. Davidson, the Social Chairman, gave an outline of the social events of the year including plans for the laboratory dances, hay rides and picnics. A summary of the year's sport program was given by committee chairman Joe Gustaferro. This organization meeting was terminated by the introduction of a copious quantity of cider, doughnuts and cigarettes.

The program for the meeting of October 24 included an interesting survey of "The Safety Program of the Ohio Power Company" by Curtis Ailes, some observations by Neal Smith on "The Latest Development in Pole Top Resuscitation" and a report by Charles Wood concerning the A. I. E. E. convention in Cincinnati. There was also some discussion of a joint dance downtown with the A. S. M. E.

The speaker of the November meeting was Virgil Brubaker who talked about, and showed samples of, "Transmission Line Construction." The sample equipment was furnished by the Dayton Power and Light Company.

#### CORRECTION

The editor wishes to apologize for the error in acknowledging the source of the illustrations for the article "Aqua Pura" of the November issue.

The diagram of the gravity filter on page 9 and of the filtering and washing operations on page 26 were furnished by courtesy of The Permutit Company, New York, N. Y.

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#### A. C. S.

Professor Watts opened the Fall Quarter activities in the first meeting of the year with an inspiring and laugh provoking talk. He painted a bright future for the young Ceramic Engineer and explained the curriculum for the department.

Professor Baggs, Ceramic Art Department, and Dr. Bole, Director of Ceramic Research at the Engineering Experiment Station, were also on the program.

A large turn out, including freshmen, enjoyed the program and helped to devour doughnuts and cider.

Willie Witzeman, social chairman, directed a successful Saturday afternoon and all evening party for members at a cabin located about seven miles from nowhere. Although Ohio State lost to Cornell, this defeat failed to dampen the spirits of the boys. "Dagwood" quadruple deck sandwiches were in vogue as were other refreshments. A short game of touch-football, played in a cow pasture, livened up the evening. A community song and card games continued far into the night.

Mr. J. E. Wiss, United States Gypsum Company, Chicago, addressed the society on Tuesday, November 12, in Lord Hall. He discussed gypsum and its uses in the Ceramic Industry.

#### A. W. S.

The Engineers of the Ohio State University have another first to their credit. Since school started this fall, the Welding Engineering students have been busy. The result is that O. S. U. now has the first student section of the American Welding Society.

On Tuesday, October 15, the students of welding engineering met and discussed the possibility of a student welding society. A constitution committee was appointed at the first meeting, and the constitution and by-laws were approved at the next meeting held on Wednesday, November 6.

The officers elected at the meeting were Emory Hecox, President; Edwin Byer, Vice President; Howard Cary, Secretary; and Thomas Broughton, Treasurer.

Professor J. R. Stitt, who was instrumental in getting the charter for the new organization from the National Congress of the American Welding Society is the advisor for the new group.

The Ohio State University Student Section of the American Welding Society takes pride in what is believed to be the longest name among the engineering professional societies.

All students in Welding Engineering who join the Society before the next meeting, held Wednesday, December 4 at 7 p. m., will be included in the group as charter members.

An engineer to his roommate: "If I am still studying when you come in, will you wake me up?"

#### A. I. CH. E.

Dr. R. L. Sibley, Research Director of the Nitro, W. Va. plant of the Monsanto Chemical Company, discussed the elements of chemical engineering used in the production processes of that organization for the November 11, meeting of the Student Branch of the American Institute of Chemical Engineers. In his talk, he accented the preparation of aniline derivatives and their use as accelerators and deoxidants in the curing of rubber.

At two business meetings held earlier in the quarter, Edwin Willing was elected Junior Representative to the Engineers' Council, the All Campus Combine candidates for homecoming queen were introduced, and plans for the first dinner meeting were considered. Henry Fullgrabe, Gordon Inskeep, and Donald Arnold were appointed as a committee to prepare a constitution for the organization.

#### A. I. M. E.

The first meeting of the A. I. M. E. was held Wednesday evening, October 9, 1940. The election of officers for the coming year was the principal event of the evening. Kenneth Folk was elected president, and promptly took over his duties. The other officers elected were the following:

Vice President, Dick Tressemer. Treasurer, Charles Stevenson.

Secretary, Albert Rusk.

The second meeting of the A. I. M. E. took place Tuesday evening, November 5, 1940, in Lord Hall. Plans were discussed for a hay ride to be held Friday evening. Nov. 15. President Kenneth Folk urged the

evening, Nov. 15. President Kenneth Folk urged the members to become affiliated with the national chapter as student associates. The suggestion is receiving favorable response from the members.

I tried to kiss her by the mill
One starry summer night,
She shook her head and sweetly said,
"No, not by a dam site."

Frosh, multiplying two by two with slide rule—"Three, point nine nine, call it four."

#### When Extremes Met

Said the Scientist to the protoplasm; "'Twixt you and me is a mighty chasm, We represent the extremes, my friend—You the beginning, I the end."

The protoplasm made reply As he winked his embryonic eye: "Well, when I look at you, old man, I'm rather sorry I began!"

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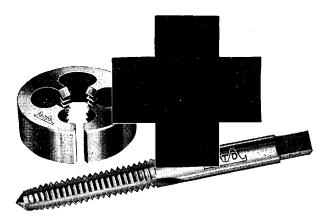
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