

For many graduate engineers, there is only one dean at O.U. In an informal report of the Engineering College's progress, W. H. Carson visits with his "boys"

# The Dean's Assignment

By DEAN W. H. CARSON  
College of Engineering

Two objects plus two objects equal four objects in any country in the world, even though the expression may be written in a hundred different languages. Likewise, the fundamental laws of science applied in the solution of engineering problems will be the same regardless of the nationality, race, creed or color of the engineer who is applying such laws.

Although an engineer who is employed in a foreign country may not understand the language or the customs of such a country, he will find he has a great deal in common in a professional way with the engineers who are Nationals.

Through this, "two plus two" common bond, I am sure each O.U. Engineering alumnus who is carving out his professional career in a foreign land is doing his part to bring about a better understanding among the peoples of the world. The work being done under the supervision of these good will ambassadors of the slide rule, regardless of whether they are citizens of this or some other country, is doing much to improve the health of the people of many nations and to raise their living standards in general.

While on the subject of foreign countries, I wish to report that there are 77 students from foreign lands enrolled in the College of Engineering.

Now that we have had a short visit with alumni who are located in many countries of the world, let us return to the campus for a visitation.

If you were here at 10:00 or 11:00 a.m. on Tuesday or Thursday, you would see several hundred freshmen entering the Engineering building to attend classes in the course, Engineering 11, Introduction to Engineering. Engineering 11 is the 1952-53 version of the old "Engineering Problems" course which was discontinued in 1942.

The text material for "Introduction to Engineering" was prepared by members of the College of Engineering faculty. It contains elementary problems which are intended to show the student the part the sciences play in the solution of engineering problems. The student is taught how to use the slide rule, make graphs and that

engineering computations must not only be accurate—they must look accurate. The text also includes sixteen "Dean's Assignments."

A few examples of these assignments are as follows:

Number 1, each student is required to fill in a table to show the week day and time his classes meet. The same procedure is followed, using a different color pencil, to show his study schedule for each class. The sheet on which this table is printed is detached so that the student can post it above his desk after it has been approved by his teacher;

Number 2, a Time Balance Problem for students who have outside employment. Through the use of a simple algebraic equation, the student is shown how to budget his time;

Number 5, involves a library assignment;

Number 6, the student is told that

one of the objects of an engineering education program is to develop within the student an ability to do creative thinking. Then as a means of exercising his imagination he is called upon to make a free hand sketch of his conception of a "Flying Saucer" and tell in fifty words or less how his version of a saucer is propelled;

Number 10, the student is asked to assume that he is a member of an engineering firm which specializes in designing signaling devices. He is told to make a diagrammatic sketch of a device he would recommend to highway engineers for adoption for the purpose of reducing motor vehicle accidents on hills and describe the manner in which his device would operate;

Number 12 requires the student to write a proposal of two hundred words or less of a plan to air condition the down-town section of Oklahoma City.

The students enrolled in Engineering 11, spend one hour each week in general as-

ARTHUR C. ATKINS, Fort Stockton, Texas, petroleum engineering senior and president of the O.U. Engineers' Club, congratulates Dean W. H. Carson, College of Engineering, on his recent selection as president of the Oklahoma Society of Professional Engineers.





ENGINEERING LIBRARY FACILITIES offer the best inducement for student study with well lighted and ventilated room. Library is located on the first floor, southeast corner, east wing.

sembly viewing a motion picture showing some phase of industrial operations or listening to a talk on the work of men and women of the engineering profession. A typical talk prepared especially for this group was: "Engineers at Work in the Chemical Industry." Illustrations, showing O.U. Mechanical, Chemical, Industrial Management and Electrical Engineers carrying out their engineering training, were used to supplement the talk. These assemblies are held in the remodeled auditorium of the main College of Engineering Building.

The knowledge gained in this course should be of value to freshmen by assisting them in the selection of the major course of study. By the way, 634 freshmen have given engineering as their preferred course of study, a gain of 275 over 1951-52.

**A** number of undergraduates of the College of Engineering received special recognition through their selection as scholars to receive industrial scholarships. The following, listed by schools or departments, are the sponsors and recipients of these scholarships.

Aeronautical Engineering — Douglass Aircraft Corporation—Thornton Blanchard;

Chemical Engineering—Maloney-Crawford Tank and Manufacturing Company—Lloyd K. Buchanan; Monsanto Chemical

Company—Robert S. Kirkland; Universal Oil Products Company—Robert Conrad Abrahamsen, Don Coldiron, Billy Wilson Threadgill and Leroy Scovill;

Civil Engineering—California Company of New Orleans—Gene Bane;

Mechanical Engineering—Hughes Tool Company—Richard Champney Alden; Standard Oil Company of Texas—Harold Cloyd Bridwell;

Electrical Engineering—General Electric—Dan Hardin;

Petroleum Engineering — Lane-Wells Company—Victor Hvolboll; Magnolia Petroleum Company—Arthur C. Atkins; Socony-Vacuum Oil Company, Inc.—Alexander D. N. Thomson; Socony-Vacuum Oil Company, Inc. (Canadian)—Wilbert M. R. Nielsen; Standard Oil Company of Texas—Robert Fred Jones.

The graduate students have fared well also as there are fourteen engineering industrial fellowships available at the beginning of the year for qualified persons. These were assigned as follows: Gulf Oil Corporation—Philip White; Magnolia Petroleum Company—Fellow not selected; American Gas Association—Fellow not selected; Texas Company—Ibrahim El-dib; Maloney-Crawford Tank and Manufacturing Company—Bill Stovall; Dow Chemical Company—Bill Galegar; Black, Sivalls and Bryson, Inc.—Bill Richards; Morehouse Industries Fellowship—Stanley Leigh Moore, Jr.; Humble Oil and Refining Company—William C. Hardy; Lane-Wells Company—Charles P. Kern; Sin-

Continued page 29



THE AUDITORIUM pictured is probably not recognizable to graduate engineers as the old Engineering Auditorium. Refurbishing and redecoration has given the room a "new" look.

Jr., Killingworth, Connecticut; Sammy LaRue, Clinton; and Price Starks, Oklahoma City, who died in the University dormitory fire in 1949.

### Shorty Went Out . . .

of several of their men to attend the University for instruction in statically indeterminate structures. And the results can be seen in the overpass on the new road between Norman and Oklahoma City.

Although still functional in special instances, truss bridges are beginning to fade out and are gradually being replaced by the modern designed arch bridge and rigid frame. The only restraining governor, stopping the contemporary movement, is the lack of professional knowledge concerning these type of structures; Mills' courses are designed to accelerate the dispersal of the needed know-how.

To be able to present this modern trend to students, Mills had to evolve several new courses: Fundamental Theory of Statically Indeterminate Stress, Practical Problems in Highway Bridge Design (The Reinforced Concrete Arch), Advanced Statically Indeterminate Stress, Theoretical Stress Analysis of Building Frames, Practical Problems in Building Frames, and The Skewed Rigid Frame.

Keeping pace with the modern design trend, Joe Keely, '30eng, '46p.c.eng, chairman of the civil engineering department, has developed a graduate course for structural engineering in Soils and Substructure Analysis.

Mills is rated as one of the outstanding men in structural design in the Southwest and his efforts at the University have brought national acclaim.

Not only will O.U. civil engineers refrain from "spoiling good fishing holes with gawky trusses," but they will contribute to the economies of the communities they serve by being prepared to design structures that are easier on the eye, cheaper to build, and more efficiently designed.

### Sooner Scene . . .

ron, '32ed, '36m.ed, and Mrs. Blanche Carleton Herron, '34, Blackwell; Dawson Houk, '14ba, '14bs, '21Law, and Mrs. Houk, Fairview; A. B. Imel, '14ba, and Mrs. Hazel Kelly Imel, '15-'16, Cushing, and O. W. Jones, '39m.ed, and Mrs. Cathryn Beckett Jones, '31, Tahlequah.

Also Dr. C. E. Lively, '30pharm, '30bs, '34bs in med, '34med, and Mrs. Lively, McAlester; R. L. March, '14, and Mrs. March, Duncan; Gen. Hal Muldrow, '28bus, and Mrs. Clara Bell Muldrow, '26, Norman; Errett Newby, '07mus, '08ba, and Mrs. Lola North Newby, '14ba, Oklahoma City; Sam W. Noble, '47ba, and Mrs. Mary Jane Cur-

tis Noble, '46bus, Ardmore; Cecil Oakes, '25ba, '37m.ed, and Mrs. Oakes, Okemah; Sam Pangburn, '30, and Mrs. Verona Browning Pangburn, '30ba, Alva; J. R. Sommerfrucht, '34chem.eng, and Mrs. Sommerfrucht, Oklahoma City; Hugh Southwick, '21pharm, and Mrs. Southwick, Garber; Fred Tarman, '10ba, and Mrs. Tarman, Norman; Lee B. Thompson, '25ba, '27Law, and Mrs. Elaine Bizzell Thompson, '24, Oklahoma City; Barth Walker, '40geol, '40Law, and Mrs. Walker, Oklahoma City; T. E. Weirich, '22geol, and Mrs. Lela Smith Weirich, '22mus, Bartlesville, and Jess Wesner, '27Law, and Mrs. Wesner, Cordell.

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clair Refining Company—Frederic N. Schneider, Jr. and Rudolph W. Buchwald, Jr.; Stanolind Oil and Gas Company—William R. Hise and Rex E. Cheek; Shell Oil Company—William G. Paulsell, William Earl Schlueter and Lejeune Wilson.

There is a slow but steady increase in enrolment of the engineering graduate program which is encouraging. I know many qualified seniors, who desire to do graduate work. However, of this number some have an obligation to fulfill with Uncle Sam, while others who are married or in debt decide it is time to be on their "own" and accept employment in industry.

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We are still "placing" these and other graduates in the type of employment for which each person is best qualified. During the first semester of this school year, representatives from over 150 companies came to the College of Engineering to interview January graduates.

**D**uring past years recognition has come to faculty members in many ways, and now the American Oilwell Drilling Contractors Association is offering a substantial honorarium to the teacher who demonstrates superior ability in teaching

subjects in the field of engineering related to the drilling industry.

Such subjects are taught by members of the faculty of several schools of the College, therefore, there are a number of persons who could be considered as candidates for the honorarium.

Several members of the faculty are carrying an extensive research, most of which is sponsored through the University of Oklahoma Research Institute. Some of these projects are: Aircraft Antenna for Air Force; Shockwaves in Spark Discharge in Gases; Measurement of Aero-Dynamic

Drag of Parachutes and Cyclonic Flow of Gases.

Faculty and graduate students of the School of Petroleum Engineering are continuing research on the American Petroleum Institute Project 47B. The research on this project has been devoted to a study of microscopic mechanisms of fluid behavior in porous media. The findings of these studies are being expressed in mathematical formulas.

The facilities for instruction and research have been improved in two areas in particular, namely: Chemical Engineering and Aeronautical Engineering. The Chemical Engineering Building has been remodeled; laboratory apparatus and equipment is being installed as funds permit. The low temperature distillation unit for the analysis of natural gases, used in a special course sponsored by the Natural Gasoline Association of America, is housed in this building.

A jet propulsion laboratory has been added to the aeronautical engineering physical plant. In this laboratory experimental and developmental work will be carried out on all types of jet-propulsion units.

The adult education service program of the College of Engineering was expanded through the addition of the Petroleum Engineering Management Conference, the Gas Hydrate Control Conference and the Oil and Gas Conservation Institute.

The daddy of all short courses, the Southwestern Gas Measurement Short Course, drew an attendance of 1,034 men in 1952 from the natural gas industry. Represented in this group were men from 27 states and two foreign countries. The University of Oklahoma can boast of having a short course with the largest number of persons in attendance of any such course in the nation.

The Swimming Pool Operators Short Course and Municipal Engineering—Planning—Management Conference were also held in 1952.

Plans have been made to move the School of Architecture and Architectural Engineering from the North Campus to the Main Campus. This School which is continuing to bring favorable national recognition to the University, will be housed in the north section of Owen Stadium.

A fitting ending for this report is, I think, an expression of thanks to the alumni who gave so generously to the College of Engineering Elevator Fund. The elevator has been installed and it is now in use—Thank you. Special credit for this drive for funds goes to Morris Spencer, '30 m.eng, Susan Aycock Turnbull, '36a.eng, and Elmer Prag, '31e.eng. They carried the "ball"—to all of you—Come by for a visit and a ride on "The Elevator."

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