

C. I. T. NEWS

JAMES RATHWELL PAGE

TRUSTEES of the California Institute of Technology at their last annual meeting elected James Rathwell Page of Los Angeles president of the Board. In this office he succeeds Allan C. Balch, whose death last May terminated ten years of service as head of the Institute's trustees.

Mr. Page has been an Institute trustee since 1929. He is also a member of the California Institute Associates and was president of that group from 1933 to 1937. A long-time resident of Los Angeles, Mr. Page has been prominently identified for many years with both the financial and civic affairs of the community. He is a trustee of the Good



JAMES R. PAGE

Samaritan Hospital, the Barlow Sanitarium, the Philharmonic Orchestra, and the All-Year Club of Southern California, and is president of the Los Angeles Community Chest. He is a director of several southern California corporations and a partner in the firm of Page, Hubbard and Asche.

At the same meeting of the Institute's Board of Trustees one new member, Keith Spalding, of Pasadena, was elected. He is the son of the founder of the universally known firm of A. G. Spalding & Co.

EAGLE ENDOWMENT

The bulk of the John H. Eagle estate was left to the California Institute of Technology, it was disclosed recently when the will was filed in probate court, Los Angeles. Four-fifths of the \$7,000,000 estate, after bequests to relatives and employees are deducted, goes to the Institute to be invested in a fund known as the "John H. Eagle Endowment," to be used for the promotion of research in physics, chemistry, and the causes, prevention and cure of disease, and for awarding prizes for notable advances in those fields, to be known as "John H. Eagle awards for scientific achievement."

The will stated that Mr. Eagle chose Caltech as the beneficiary of the bequest because he was "inspired in great measure by his admiration and affection for Dr. Robert A. Millikan."

Mr. Eagle stated, in his will, that he prefers to leave the purpose for which the fund will be employed to the judgment of the Board of Trustees of the school.

Mr. Eagle was 74 years old when he died in July of last year. He was a retired Pennsylvania silk manufacturer who came to California in 1930.

RECEIVES CITATIONS

BRIGADIER General Carlyle H. Ridenour, '18, whose bomber wing has carried out "highly successful" raids on Rome and Naples, has received the Air Medal and Oak Leaf Cluster to the Air Medal. Major General James H. Doolittle decorated General Ridenour on July 4 in North Africa with the Air Medal, setting forth in the accompanying citation that it was "for meritorious achievement while participating in six sorties against the enemy." Two days later the Oak Leaf Cluster was awarded "for participation in five sorties."

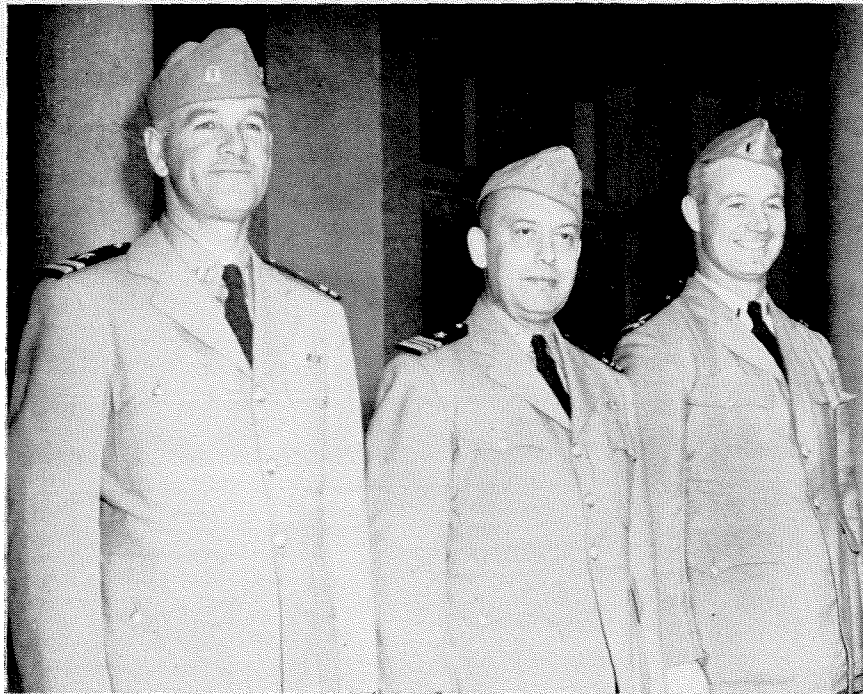
Previously, General Ridenour had received the Silver Star medal for gallantry in action. He had led several



BRIGADIER GENERAL CARLYLE H. RIDENOUR

missions which resulted in extensive damage to Axis military installations and shipping.

Mrs. Ridenour, of Pasadena, has received letters from the General telling of the location of their base in a desert valley that has been extremely hot. More recently his wing has been moved to a beach base.



AT LEFT:

Left to right: Lieutenant Miles E. Morgan, executive officer; Lieutenant Commander E. W. Mantel, commanding officer of the unit; and Lieutenant (j.g.) Stanley F. Murphy, athletic director.

THE NAVY'S V-12 PROGRAM

ON JULY 1, 535 students arrived on the campus of California Institute of Technology to start training in engineering under the Navy's V-12 program from which successful candidates will emerge with degrees in engineering and commissions as ensigns in the United States Naval Reserve. This large group of students, many of them former Caltech men, came from high schools, colleges, and from the ranks of the Navy.

V-12 students are rated as apprentice seamen of the Navy, and in addition to their education, housing, food, clothing, and medical services, they receive the apprentice seaman's base pay of \$50 a month. The Navy students occupy the student houses on the campus, and civilian students have moved to quarters off the campus.

The educational facilities of the school are operating for the Navy group along the same lines as they have been conducted in the past to fit civilian students for engineering degrees.

Lieutenant Commander Eugene W. Mantel, U.S.N. (Ret.), commanding officer of the V-12 unit, is a graduate of the United States Naval Academy, class of 1920, which graduated in 1919 because of World War I. From the time of his graduation until 1925 Commander Mantel served at sea and then retired to enter business. He was recalled in December, 1941, to active duty.

Lieutenant Miles E. Morgan, U.S.N.R., executive officer of the unit, was assistant superintendent of schools in Santa Monica before entering the Navy. In World War I he was in the Army Air Service.

Lieutenant (j.g.) Stanley F. Murphy, U.S.N.R., previously coach and instructor at Marshall High School in Chicago, is administrator of the physical fitness program of the V-12 unit.

Lieutenant (j.g.) Ebon B. McGregor, Medical Corps, U. S. N. (Ret.), medical officer of the unit, was recalled to active duty and assigned to the Institute in June, 1943.

sequently all matters concerning the Honor System will be handled by the Board of Control.

MRS. A. C. BALCH PASSES

MRS. Janet Jacks Balch, widow of the late Allan C. Balch, who had been an associate of the Institute for many years and president of its Board of Trustees, passed away August 4, three months after the death of her husband.

Mr. and Mrs. Balch will be remembered by the California Institute of Technology and other educational institutions for their generous endowments toward buildings and improvements on the campus. They assisted in the creation of the Kerckhoff Biological Laboratories, founded the Balch School of Geological Sciences, and financed the building of the Athenaeum, a social center for associates at the Institute.

Mr. and Mrs. Balch had celebrated their golden wedding anniversary two years ago in April and a reception was given at the Athenaeum in their honor. Approximately 3000 guests attended.

Together Mr. and Mrs. Balch have done much for the community and have won the esteem of all for their devotion to the Institute and their participation in social and civic affairs.

PROFESSOR CLAPP RETIRES

W. Howard Clapp, professor of mechanism and machine design at the California Institute of Technology, retired at the close of the last school term. He joined the Institute staff as instructor in 1911, and has been a professor since 1918. The Alumni Association presented Professor Clapp with its first Honorary Life Membership for his interest and cooperation in alumni activities.

WAR TRAINING COURSES

○ N July 1 the Institute began another year of participation in the government-sponsored program of special war training courses. As in the past, these courses are given tuition free; they are all designed to supply trained personnel for essential war industries or to facilitate upgrading of men and women already employed in such industries. Listed below are the courses scheduled to begin during September, 1943. Others may be added to this list later. Unless otherwise specified, classes will meet on the Institute campus in Pasadena.

ADVANCED EXPOSURE AND NEGATIVE CONTROL
Date and place to be announced later; 2 evenings weekly, 14 weeks.

ADVANCED TOOL ENGINEERING
Begins September 15; 2 evenings weekly, 12 weeks.

ADVANCED TOOLING PROBLEMS
Begins September 14; 1 evening weekly, 10 weeks.

AIRCRAFT FITTING ANALYSIS
Begins September 1, Long Beach Junior College; 1 evening weekly, 20 weeks.

AIRCRAFT PRODUCTION ILLUSTRATION
Begins September 24; Art Center School, 2544 West 7th St., Los Angeles; 2 evenings weekly, 8 weeks; 3 evenings weekly, 12 weeks; total, 20 weeks.

CHEMISTRY AND PHYSICS OF PHOTO-TRACING, I
Begins September 24; Art Center School, 2544 West 7th St., Los Angeles; 2 evenings weekly, 12 weeks.

CHEMISTRY AND PHYSICS OF PHOTO-TRACING, II
Begins September 27; Art Center School, 2544 West 7th St., Los Angeles; 2 evenings weekly, 14 weeks. (A special class for swing shift workers will meet during the day, 2 days weekly.)

ELECTRONIC CIRCUITS
Begins last week in September; 3 evenings weekly, 10 weeks.

ELEMENTARY DIFFERENTIAL EQUATIONS WITH ENGINEERING APPLICATIONS
Begins second week in September; meeting place to be arranged; 1 evening weekly, 14 weeks.

ENGINEERING MATERIALS AND PROCESSES
Begins September 21; 2 evenings weekly, 10 weeks.

INDUSTRIAL RELATIONS AND PRODUCTION ENGINEERING

(The courses listed below will begin the week of September 13. Unless otherwise noted, they will meet 2 evenings weekly for 13 weeks. The starred courses will also be given at El Segundo High School, beginning the week of October 18).

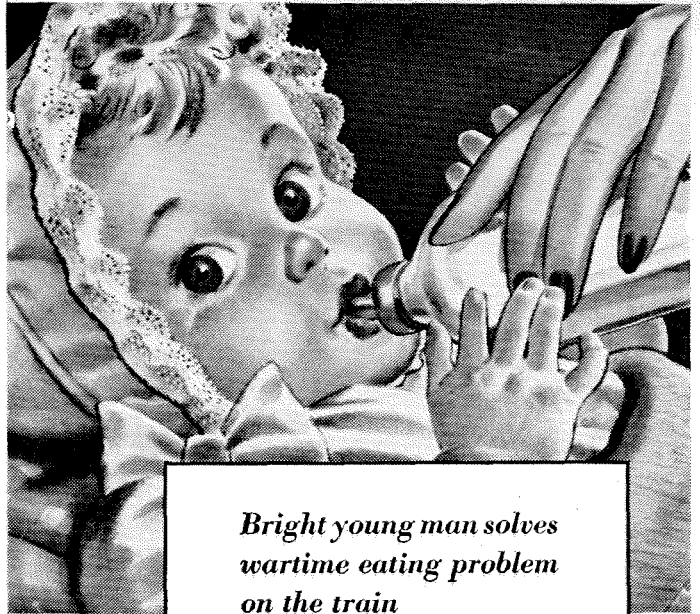
- *COST ANALYSIS AND CONTROL
- *COST ESTIMATING
- FACTORY COST CONTROL (1 evening weekly)
- *INDUSTRIAL MANAGEMENT
- *INDUSTRIAL RELATIONS FOR SUPERVISORY PERSONNEL
- INDUSTRIAL WAGE INCENTIVES
- LABOR RELATIONS FOR SUPERVISORY PERSONNEL
- MANUFACTURING INDUSTRIES AND PROCESSES
- *MOTION AND TIME STUDY
- PRODUCTION CONTROL
- *SELECTION AND PLACEMENT OF PERSONNEL
- *TECHNIQUES OF TRAINING PERSONNEL
- *WAGE AND SALARY DETERMINATION AND JOB ANALYSIS

FUNDAMENTAL ENGINEERING MATHEMATICS, II
Begins September 20; 2 evenings weekly, 18 weeks.

FUNDAMENTAL ENGINEERING MATHEMATICS, III
Begins September 23; 2 evenings weekly, 18 weeks.

INTRODUCTORY ELECTRONICS
Begins last week in September; 3 evenings weekly, 10 weeks.

SEPTEMBER, 1943



*Bright young man solves
wartime eating problem
on the train*

(many grownups bring box lunches)

IN THE FIRST SIX MONTHS OF 1943 Southern Pacific's dining cars served 6,155,000 meals—nearly five times as many as in 1940. Last year we served a million more dining car meals than any other railroad. And we are now serving more meals to the armed forces than any other **THREE** railroads!

Remember, we can't build new dining cars because of material shortages. So aside from a few dining cars leased from other roads, we have to operate with only the dining car equipment we had before the war. Dozens of our diners are now in military service.

Counting lunches and sandwiches served in coaches, and meals at our restaurants and fountains, we fed 11,178,000 people during the first six months of 1943—an increase of more than 5 million! With rationing, food shortages, and inexperienced help, we think any housewife will agree we have had our hands full.

While we're not happy about the wartime congestion on our trains, we have the satisfaction of knowing that we've stretched our dining car facilities as far as is humanly possible. We're going to continue to do all we can to give the best service possible to you folks who **NEED** to travel.

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THE FRIENDLY SOUTHERN PACIFIC

MATERIALS TESTING LABORATORY

Begins September 22; 1 evening weekly, 12 weeks.

MATHEMATICAL PROBABILITY, STATISTICS, AND NUMERICAL METHODS FOR WAR WORKERS

Begins fourth week in September; meeting place to be arranged; 1 evening weekly, 14 weeks.

METALLOGRAPHY LABORATORY

Begins September 20; 2 evenings weekly, 12 weeks.

MINING METHODS

Begins September 8; 2 evenings weekly, 12 weeks.

PLASTICS, I (Chemistry and Technology)

Begins September 20; 1 evening weekly, 17 weeks.

PLASTICS APPLIED TO AIRCRAFT, I (Chemistry and Technology)

Begins September 21; University High School, 11800 Texas Avenue, West Los Angeles; 1 evening weekly, 17 weeks.

PHYSICAL METALLURGY FOR ENGINEERS

Begins September 21; 2 evenings weekly, 12 weeks.

PRODUCTION DESIGN

Begins September 21; 2 evenings weekly, 12 weeks.

TOOL ENGINEERING—JIGS AND FIXTURES

Begins September 13; 2 evenings weekly, 12 weeks.

Detailed information about any of these courses, together with prerequisites for enrollment, can be secured by writing or telephoning to the WAR TRAINING OFFICE, California Institute of Technology, Pasadena, 4. Students accepted for enrollment are eligible to apply for supplementary gasoline, if this is necessary for class attendance. The Institute will endorse such applications.

MERCHANT MARINE CALLS

The Merchant Marine needs engineering officers to man its growing fleet.

Special concessions have been made in providing a post-

graduate course to men holding accredited mechanical and electrical engineering degrees whereby these men may qualify within three or four months to obtain their licenses as Third Assistant Marine Engineers.

Any qualified Caltech alumni may apply for this training by contacting Andrew G. Wilson, Port Representative, Recruitment and Manning Organization, War Shipping Administration, 642 Avalon Boulevard, Wilmington, California.

Oil Is Ammunition!

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purposes. Rationing, originating for other purposes, will probably have to be continued and perhaps made more stringent, to conserve petroleum.

Known recoverable reserves represent 14 years' supply, but productive capacity will be inadequate unless discovery is accelerated. There is hope for the future in improved recovery practice.

California must provide the main supply for the enormous demands of the United Nations in the Pacific. The rest of the United States is a major source for the Atlantic. Japanese and German supplies are small compared to ours, but were greater in 1942 than in 1941.

Axis nations could be greatly handicapped by destruction of part of their oil supply. Our own supply might just as well be destroyed by the enemy as used unwisely.

Oil is ammunition—use it wisely!

THROUGH the far-reaching influence of the California Institute of Technology, Pasadena has taken a place in the world of science which bids fair to spread its fame to all parts of the Universe—not alone in the realm of world conflict but more pleasantly and usefully in the happier achievements of a world at peace.

Engineering and Science Monthly is destined to speak for a great institution to a receptive people, and in so doing the home of that institution—Pasadena—will be further enriched as a center of education and science.

Chamber of Commerce & Civic Association of Pasadena