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NEW PRESIDENT OF C. I. T.

AT a meeting of the Institute faculty, May 13, 1946, James R. Page, chairman of the board of trustees, announced the election of Dr. Lee A. DuBridge, 45, to the presidency of the California Institute of Technology. Dr. DuBridge succeeds Dr. Robert A. Millikan, vice president of the board of trustees, whose retirement as president last August left the Institute without a head.

DR. LEE A. duBRIDGE

Mr. Page stated that the trustees were keenly aware of the educational problems and the increased responsibility that would face the Institute during the period of postwar readjustment in an era when science and technology will inevitably have a more profound and immediate effect on the life of the community and the nation. "Our institution and the whole southern California community are indeed fortunate," said Dr. Page, "that Dr. DuBridge is willing to assume the leadership of the California Institute of Technology. Dr. DuBridge is not only an internationally known scientist, but an experienced and successful administrator as well. His work as director of the Radiation Laboratory at the Massachusetts Institute of Technology, where he headed a large section of the great radar development, has amply demonstrated his capacities."

A native of Indiana, Dr. Dubridge was graduated from Cornell College, Iowa, in 1922, and continued training in his chosen field of physics at the University of Wisconsin, where he received the degree of Doctor of Philosophy in 1926. He is no stranger to the California scene or the California Institute of Technology. From 1926 to 1928 he pursued his researches in physics at the Institute as a Fellow of the National Research Council, having elected to come here in order to work with and under Dr. Millikan. In 1928 he went to Washington University in St. Louis as assistant professor of physics, later becoming associate professor.

In 1934 Dr. DuBridge was called to Rochester University as Harris Professor of Physics and chairman of the department. He also served as dean of the faculty from 1938 to 1942.

His outstanding reputation as a scientist and his proved administrative capacity led to his being chosen in November, 1940, to head the Radiation Laboratory then being established by the National Defense Research Committee at the Massachusetts Institute of Technology. He served as director of the laboratory, on leave of absence from the University of Rochester, until his return to the faculty of that institution on February 14, 1946.

The Radiation Laboratory was set up to develop radar for military purposes. The success of that work and the crucial part which radar played in winning the war are now a familiar story. The work of the laboratory played the decisive role in maintaining clear supremacy in radar over the enemy countries by difficult and intensive research and development, by crash procurement of apparatus, by personnel training and by assistance and advice at the front.

As director of the Radiation Laboratory, Dr. DuBridge supervised the work of 3,900 persons, and handled a budget of some $4,000,000 a month. Radar equipment developed directly by the laboratory went into production for the armed forces to the extent of two billion

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velt appear to have been incorrectly advised at Casablanca that the morale of the German people could be broken by bombing their cities, and that the ability of the German Army to resist could be materially reduced by bombing munitions plants. The two air forces did a remarkable job; the physical destruction wreaked was terrific. Nazi propaganda, however, was able to maintain the German will to resist in spite of great personal discomfort, and the Allies had not reckoned on the recuperative capacity of German industry.

Secondary criticisms of the Combined Bombing Offensive can be made, though they are mentioned with full appreciation of the fact that hindsight affords an unfair advantage: 1) Allied Intelligence failed at many points, especially as to industrial matters. 2) The types of bombs dropped and their fuses were not such as to cause maximum damage to the targets; the percentage of duds was high. 3) Undue emphasis was put upon tons dropped, regardless of their effectiveness.

Too much cannot be said in praise of the crews of the bombers and the pilots of their fighter escorts, and for the way in which they carried out their parts in the Combined Bombing Offensive. The airplanes themselves were highly satisfactory. Division Commanders worked out brilliant devices such as formation flying, to insure the return of as many as possible of the aircraft and their crews.

If strategic bombing was not as successful as expected in reducing the will and ability of Germany to resist, what did beat her? The answer appears to be this: As a by-product of strategic bombing the Allies secured air superiority; with air superiority it was possible to mount, execute, and carry through a successful invasion. The ground forces moved into Germany with air cover. The Luftwaffe had been beaten, and Germany's ground forces, acordingly, were at a great disadvantage. Germany was not beaten until Allied soldiers physically took over the occupation of Germany. The question that remains to be answered is: Could the Allies have secured air superiority over Germany in a more direct way than through the use of thousands of four-motored bombers, tens of thousands of lives, and billions of dollars?

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dollars. In directing the work of the laboratory, Dr. DuBridge won the wholehearted cooperation and confidence of the scientists, the industrialists, and the armed forces. To the thousands engaged in the effort, his name is synonymous with intelligence, integrity, and modesty; and they bear witness that his attitude made this important war work a model of fellowship in effort.

Internationally known for his research work in nuclear physics, Dr. DuBridge supervised the construction and installation of an atom-smashing cyclotron at the University of Rochester in 1938. This seven-million volt apparatus produced in 1938 the highest energy proton beam which had been used up to that time.

Among the academic, professional, and scientific organizations of which Dr. DuBridge is a member are, the National Academy of Sciences, the American Physical Society (of which he is now vice-president), Sigma Xi, Phi Beta Kappa, the American Association for the Advancement of Science, the American Optical Society, the Institute of Radio Engineers, the American Association of Physics Teachers, and the American Association of University Professors. He is representative of the American Physical Society on the Physical Science Division of the National Research Council, and a member of the executive committee of the American Institute of Physics.

He has been a member of the editorial boards of the American Physics Teacher, the Physical Review, the Review of Scientific Instruments, and is consulting editor of the International Series in Physics. He has published many articles in scientific journals, and also two books, "Photoelectric Phenomena" (1932) and "New Theories of the Photoelectric Effect" (1935).

In 1925 Dr. DuBridge was married to Doris May Koht of Reinbeck, Iowa. They have two children, Barbara, 15, and Richard, 12.

It is expected that Dr. DuBridge will assume his new duties as president of the California Institute of Technology at the beginning of the next academic year, in September, 1946.

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laboratories, but also much work can be done in the "fine structure" of engineering, to borrow a term from spectroscopy—in details of analysis and performance which are no longer unimportant in modern, more refined engineering design. The colleges are in a favorable position in engineering research, since all phases of science are represented and may be made available for contribution to specific problems. With a proper balance between such research and teaching, the colleges can be even more effective in their primary responsibility—the training of engineers.

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