



HISTORICAL ACHIEVEMENTS

VALLEY OF THE GIANTS

"When I want to understand what is happening today or try to decide what will happen tomorrow, I LOOK BACK."

OLIVER WENDELL HOLMES

D. ADAM DICKEY



This month's Giant, in our "Valley of the Giants" series, is D. Adam Dickey, who is currently our Club's oldest member from the standpoints of both age and duration of membership, and who joined the Club in 1921, at the age of 28.

The following is a newspaper story by Clem Hamilton for the *Dayton Daily News* on August 5, 1984:

Daytonian's long, successful career brings him warm memories

Ninety-one-year-old Adam Dickey isn't sure which of his several contributions to aviation was the most important. But the highlight of his career occurred December 8, 1943 when Secretary of War Henry Stimson presented him with the Emblem for Exceptional Civilian Service in ceremonies at the Pentagon in Washington. When Dickey recalls the event, it's as though it were only yesterday.

He was cited out of the entire civilian complement of the Army Air Forces—about 350,000 persons—for the first such award. One civilian was selected from each of the three Army services—Army Air Forces, Army Ground Forces, and Supply Services.

In 1943, Dickey was civilian chief and technical adviser of the Propeller Laboratory, Army Air Forces Materiel Command, Wright Field, Dayton.

Over the years he has accumulated many items of memorabilia. But the one item he won't let out of his possession is the photograph of Stimson pinning the ribbon on him for his contributions to the war effort. "It's the only print I have and I don't have the negative," he said. "So I treat it with care. I can't replace it if it's lost or damaged."

In his speech, Stimson told an estimated crowd of 10,000 that Dickey was responsible for developing the high standards of airplane propellers and that propellers of American design were being used on three-fourths of the world's planes.

Dickey and his wife, who have lived at Friendship Village since it opened 10 years ago, keep up their interests in current events these days but don't get around as much as they used to.

It's been several years now since Dickey was last in an airplane and he can't recall whether it was propeller-driven or jet-propelled. If he's ever been in a jet, he conveniently can't remember. After all, propellers are what propelled him into the forefront of aviation. They have been, as Dickey remarked in 1943, one of the three loves of his life. The others are

electrical equipment and Cassie Coleman, his wife.

Dickey was born in Eaton on March 13, 1893, to S. Martin V. Dickey and Mary Ellen (Grauser) Dickey. His parents moved to Germantown when he was 6 years old and he attended public schools there through high school graduation in 1911. He worked a year to save money to attend Ohio State University where he earned a degree in electrical engineering in 1916.

In June, he enrolled in a special course for graduate students at Westinghouse Electric and Manufacturing Co. East Pittsburgh, Pa., at the conclusion of which he was employed in the research division. Dickey was assigned to a special project for the Army Signal Corps to develop an aircraft propeller made of bakelite micarta.

"This material was not adversely affected by changes in the moisture as wood was, he said. "With the advent of 400-horsepower Liberty engines in the offing and American experience at the time limited to 90- and 100-horsepower engines, it was felt necessary to subject the propellers to severe whirl tests."

At the government's request, Westinghouse set up a special whirl rig with a 600-horsepower motor which drove a propeller by a belt-driven jack shaft to over 2,000 revolutions a minute. Dickey was assigned to this activity.

Meanwhile, McCook Field was being established in Dayton and many of the propellers for whirl testing at Westinghouse had come from Dayton. The aviation engineering activity of the Signal Corps was being transferred from Washington to Dayton.

By the end of WW I, Dickey had acquired a strong interest in aviation. "I felt there was much development work to be done in this growing activity," he said. With this increasing interest along with a desire to get back to his native Ohio, Dickey accepted a position in the propeller section at McCook in February 1919. On June 3, he and Cassie Marie Coleman of Ashtabula were married.

"My plan was to get more experience in the aeronautical field and then go to some commercial aero company,"

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he recalled. "The work was so interesting and engaging that before I was really aware of it almost 39 years had passed."

At the time Dickey was cited by the Army, he held 13 patents on propeller items. Although he gained those patents on his own, it was in the field of such research that he took greatest pride. "The government invited citizens to submit any ideas they had that might contribute to the defense of the nation," he said.

"I felt that those ideas hatched by citizens should be treated in confidence because a lot of them were associated with patentable ideas. And so we leaned over backwards to treat the information in a confidential manner and not to cripple their pursuit by getting patents that were associated with their ideas.

"We took the position—at least we did at our laboratory—that if we could contribute an idea to theirs, help it out, make it better, we gave it to them. I felt proud of my contribution in gaining their confidence, of our part in furthering their ideas," he said.

Dickey retired in 1957 at the age of 64.

In another article, written in 1943 following Mr. Dickey's "Award for Exceptional Civilian Service", it was mentioned that the award would have been made by President Franklin D. Roosevelt, had he not been called to Casablanca for a meeting with Winston Churchill.

The Club appreciates the help of Alan Watton, Club member since 1944, as well as an electrical engineer of long standing with the laboratories at WPAFB, who is acquainted with Mr. Dickey. In addition to furnishing the above information, he writes:

Adam Dickey's entire professional career of some forty years was closely associated with the development of propellers for military air-

craft, including both reciprocating and turbine engine applications.

He served as the Technical Director of the Propeller Laboratory from 1939 to 1957. Many of us came to respect and appreciate the high professional standards that he set for the organization. During this period of time he was associated with a host of technical developments during World War II and afterwards for which he was awarded the Exceptional Civilian Service Award in 1943.

One airplane that is still flying today and in which he and his people played a key role in the development of the propellers and engines is the C-130 transport aircraft. His professionalism in engineering work is reflected in the record of high reliability and flight safety of these aircraft. Something over 1500 of the aircraft have been built and operated all over the world by the military services of many nations and by a variety of governmental and commercial organizations.

He first became associated with propellers in 1917 during World War I while he was still working at the Westinghouse Company in Pittsburgh (in connection with the development of a bakelite propeller for the Liberty engine, including the setting up of an electrically-driven propeller test rig).

He came to McCook Field in 1919, and was involved in a variety of early propeller developments, including the designing and building of a second propeller test rig.

He was closely associated with the move of the aeronautical research and development activities to Wright Field in 1927. In that connection, the story is that he and a man named M.A. Smith (an electrical engineer, also from Westinghouse) came down to the library of the Engineers' Club to find the peace and privacy to write the specifications for the new Propeller Whirl Rigs to be built at the new installation. He supervised the subsequent construction of the facility.

Attention Writers

The Dayton Engineer is soliciting articles for publication in this monthly newsletter. The articles can be on any subject including business, humor, technology, science, poems and all related subjects.

Please call the Club at 228-2148 if you are interested.

Call for Luncheon Speakers

The Technical Education Committee is planning the fall and winter luncheon speaker program. Presentations are 30 to 45 minutes in length.

Previous topics include: Superconductivity, Cold Fusion, Quality in Manufacturing, Wright Stepp: Engineering Education, National Aero-Space Program.

The presentations have been well received with 20 to 80 attendees at each luncheon.

To discuss possible subjects and flexible dates, call Committee Chairman Harvey R. Tuck at 274-5853.

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