

CAPTAIN WALTER STUART DIEHL,
UNITED STATES NAVY, RETIRED

Walter Stuart Diehl was born in Jonesboro, Tennessee on December 3, 1893, son of William Polk Diehl and Lydia (Showalter) Diehl. He attended public schools of Jonesboro, and received his Bachelor of Science degree in Electrical Engineering from the University of Tennessee at Knoxville in 1915. He enlisted in the United States Navy on August 6, 1917, and was first commissioned in the rank of Ensign U.S. Naval Reserve Force, on July 10, 1918. Transferring to the U.S. Navy in 1921, he was commissioned Assistant Naval Constructor with the rank of Lieutenant. He subsequently advanced in the grades to the rank of Captain to date from June 16, 1942. His transfer to the Retired List of the Navy in that rank became effective April 1, 1951.

Before the first World War, he was employed by The Fulton Company Knoxville, Tennessee, and worked in the shops, and for a year and a half was Mechanical Engineer for that company. In August, 1917 he reported for active duty as a Landsman for Machinist Mate, at the Ground School, Naval Air Station, Pensacola, Florida, and in November continued the course at Massachusetts Institute of Technology, Cambridge. In January, 1918, he was promoted to Chief Quartermaster, and the following month returned to Pensacola for flight instruction. From May to September, 1918, he had a postgraduate course in Aeronautical Engineering at Massachusetts Institute of Technology.

For three years from September, 1918, he was attached to the Navy Department, Washington, D. C., in the Bureau of Construction and Repair, Aircraft Division. When the Bureau of Aeronautics was organized, he transferred to that Bureau, Design Division, dating from September, 1921. He was designated Naval Constructor in 1929, and in 1936 transferred to the Line and was designated for Aviation Engineering duty only, specializing in Aerodynamics and airplane design continuously thereafter until his retirement.

His various assignments in the Bureau of Aeronautics included Liaison Officer to the National Advisory Committee on Aeronautics, and Liaison Officer with the Postgraduate School, Annapolis, Maryland. In the latter assignment he made a study and report on the aeronautical aspects of the Navy Postgraduate Educational System. He was serving as Assistant for Research Liaison, and served on many of the committees and subcommittees of the Naval Advisory Committee on Aeronautics.

Captain Diehl, a pioneer in aerodynamics and aircraft design, with special emphasis on features that affect performance, is also the author of Engineering Aerodynamics, termed the "bible" in that field. He acted on aerodynamic and hydronamic matters for the Navy before the establishment of the Bureau of Aeronautics; is credited with initiating action which led to establishment of the David W. Taylor Model Basin, Carderock, Maryland; the Aircraft Research Station at Chincoteague, Virginia, and the Navy's test flight unit at Naval Air Station, Anacostia, D. C., later developed into the Naval Air Test Center, Patuxent, Maryland.

Captain Diehl received a Letter of Commendation with Ribbon from the Secretary of the Navy, "For exceptionally meritorious performance of duty . . . since 1921, with particular reference to the period from 1938 to the present (12 October 1945). By your remarkable leadership, your special scientific, scholarly, comprehensive knowledge and your untiring devotion to duty, you were able to insure outstanding aerodynamic qualifications in the naval airplanes of the war period. Your cooperation with the National Advisory Committee for Aeronautics, your supervision and your interpretation of wind-tunnel flights and model basin tests, and your ability to concentrate effort along the most productive lines, have led to steady improvement in the science of aerodynamics, and have at the same time made important contributions to the fighting efficiency of the naval aircraft. . . By your performance of studies of extremely difficult complexity, you have made an outstanding contribution to the Navy and to your country. . ."

Captain Diehl also has the World War I Victory Medal; American Defense Service Medal; American Campaign Medal and the World War II Victory Medal.

He is a Fellow of the Institute of Aeronautical Sciences, a member of the Washington Academy of Sciences; National Sojourners; Potomac Appalachian Trail Club; Potomac Rose Society; American Rose Society; and Greek letter fraternities.

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