## CAPTAIN RALPH STANTON BARNABY, UNITED STATES NAVY, RETIRED

Ralph Stanton Barnaby, recognized as a leading authority on gliders, holder of the National Aeronautical Association Number One Soaring Certificate, a founder-member and Fellow of the Institute of Aeronautical Sciences, member of the American Society of Mechanical Engineers, charter member and director and past president of the Soaring Society of America, and author of many technical papers on aeronautical engineering subjects, including a book, Gliders and Gliding (1930), also managed to combine the unusual qualities of engineering, glider piloting and designing, and sculpture with a naval career. He transferred to the Retired List of the Navy on January 1, 1947.

Born in Meadville, Pennsylvania, on January 21, 1893, son of Charles Weaver Barnaby and Jenny Christy Barnaby, he attended private school in New York City before entering the Columbia University, New York, New York, where he was graduated and received the degree of Bachelor of Mechanical Engineering in 1915. In 1945, Columbia awarded him its Medal of Excellence and cited "his many achievements in aeronautics including his experiences in gliding and soaring." The award is in lieu of a degree of Master of Arts, or Master of Science.

His interest in aviation began in 1908 with the newspaper accounts of Orville Wright's flights at Fort Myer, Virginia, for the Army. During the next three years he was busy with model airplane experimentation. In 1909 he designed, built and flew his first man-carrying glider, and in 1910 founded the New York Model Aero Club. He qualified for membership in the Early Birds, and has remained active, being Vice President of that organization, 1941-42. He was assistant chief engineer and head of the Engineering Department of Standard Aeronautical Corporation, Plainfield, New Jersey, until he enlisted in the United States Navy in December, 1917. He was discharged to be commissioned Ensign in the U.S. Naval Reserve Force, to date from March 26, 1918. The next year he was commissioned Lieutenant, junior grade, Construction Corps, U.S. Navy. Transferred from the Construction Corps to the Line of the Navy in 1940, and designated for Aeronautical Engineering Duty Only, he attained the rank of Captain on November 11, 1942.

After training at the Naval Aeronautical Ground School, Massachusetts Institute of Technology, Cambridge, Massachusetts, Curtiss Aeronaud Motor Corporation, and in the Inspectors School, Buffalo, New York, he became assistant inspector, later inspector of naval aircraft in the plant of the L.W.F. Engineering Corporation, College Point, New York. In August, 1918 he was ordered overseas to assist with study of aviation materiel and European aircraft developments in England and France. Returning to the United States in February, 1919, he assisted in the preparation of the NC flying boats for the transatlantic flights.

After three years at the Naval Aircraft Factory, Philadelphia, in November, 1922 he reported to the Bureau of Aeronautics as Head of the Specifications Section, where he served a total of nine years, having detached duty for one year, January, 1928-29, at Wright Field, Dayton, Ohio, as Assistant General Inspector and Material Liaison Officer with the Engineering Division of the Army Air Corps. In 1929 he was a member of the Kemperer Expedition to investigate soaring conditions in

mountainous regions. One of the most important works handled during his duties in the Bureau of Aeronautics was the establishment of the Army-Navy Aircraft Standards Board, through which materials and equipment are brought into uniformity, a great boon to the aircraft industry in general.

In January, 1930 he achieved international recognition by making a glider flight from the rigid airship LOS ANGELES, the first in history. Thereafter he took part in the first National Soaring Contest at Elmira, New York, and the two succeeding meets in the summers of 1931 and 1932. He was made a member of the National Contest Committee of the National Aeronautics Association. While associated with Rear Admiral William A. Moffett, Chief of the Bureau of Aeronautics, he fashioned a sculptured bust of the Admiral, completing it just a few days before his untimely death in the crash of the USS AKRON (Sunday Star, Wash.DC-April 23,1933). That bust and another of Admiral W. S. Sims which he made are now in Memorial Hall, Bancroft Hall, at the Naval Academy.

After July, 1933 he served as Inspector of Naval Aircraft, Baltimore, Maryland, and the following year was on duty at Naval Air Station, Pensacola, Florida, where he sponsored a glider training experiment. He was commended by Secretary of the Navy Swanson in 1935, the letter stating in part as follows:

"Recently there has been brought to my attention your outstanding achievements in the field of gliding and soaring during the last twenty-six years, and more particularly your accomplishments along this line during the last five years. Specifically, on 31 January, 1930 you made the first glider descent from an airship, the USS LOS ANGELES. This in itself. . . is worthy of special note. Furthermore, your unusual interest . . . is shown by the continuing record of accomplishment. It is noted that you hold the Number One Soaring license in the United States; that you advocated the use of gliders in preliminary aviation training; that you have taken part in all national soaring meets since 1930. It is further noted that this training and experience, which has been of inestimable benefit to the Navy, has been acquired by you largely on your own initiative and your own time, and at your own expense. . "

While at the Pensacola Naval Air Station, he was a student of heavier-than-air aviation, and was designated a Naval Aviator on May 12, 1937. The following summer he was ordered to the Fleet Air Base, Coco Solo, Canal Zone, and after two years there, he was ordered to the Naval Aircraft Factory, Philadelphia, where he served as Chief Engineer, and the last year of the war he was Commanding Officer of the Naval Aircraft Modification Unit, Johnsville, Pennsylvania. He was awarded the Air Medal, and Legion of Merit for this period of service, the citations stating in part:

Air Medal: "For meritorious achievement in aerial flight as a Pilot of Naval Aircraft from 1942 to 1944. Zealous and farsighted in his efforts to advance Naval aviation and explore the possibilities of a practical glider and towed-aircraft program, Captain Barnaby not only conceived and planned many innovations in this pioneering field,

" - but also personally conducted numerous flight tests of experimental and hazardous nature to prove the feasibility of techniques he advocated. . ."

Legion of Merit: "For outstanding conduct . . . as Commanding Officer of the Naval Aircraft Modification Unit . . . from June, 1944 to August, 1945. Displaying exceptional foresight, judgment, and professional ability, Captain Barnaby rendered invaluable service in the production of aeronautical equipment and special weapons for immediate use by the combat forces, and by his fine technical skill and tireless efforts, contributed materially to the success of our forces . . "

He continued in the latter assignment until relieved of active duty pending his transfer to the Retired List of the Navy on January 1, 1947. He has since then had active duty to represent the Navy at the annual National Soaring Contest, Elmira, New York. In the summer of 1950 he also attended the First World Championship Soaring Competition in Orebro, Sweden, in which eleven nations competed.

Upon his retirement he became associated with Franklin Institute, Philadelphia, Pennsylvania, where he is Head of the Aeronautical activities in laboratories for research and development at that Institute.

He is currently President of the Aero Club of Pennsylvania; First Vice President of "Early Birds"; and East Coast Vice President and Director, Soaring Society of America.

In addition to the Legion of Merit and Air Medal, Captain Barnaby has the World War I Victory Medal, Overseas Clasp; American Defense Service Medal, Base Clasp; American Campaign Medal; and World War II Victory Medal.