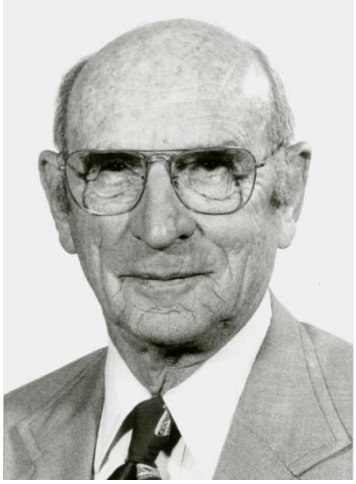
MEDALIST FOR 1989

For development of the NACA cowl and the steerable tricycle landing gear which resulted in significant improvement in practical aircraft design and performance.



FRED E. WEICK

After designing the first full-size wind tunnel for propeller research, followed by the development of the NACA cowling which gave a borrowed Curtiss Hawk military aircraft a speed increase of 19 miles per hour (a conservative number for what this design ultimately would do), Fred Weick went on to design and build "the Peoples Plane."

Fred was linked with a science teacher in high school who, noting his interest in model airplanes, suggested that Fred could earn a living doing what he thought was fun (building airplanes). After completing a university plan directed at aeronautics, he graduated from the University of Illinois in 1922. He began his career very uneventfully as a draftsman with the U.S. Air Mail Service, establishing night landing and emergency fields for mail delivery.

With the U.S. Navy Bureau of Aeronautics, Weick concentrated on propeller research, working mostly with sub-scale designs because of wind tunnel limitations. A 1925 NACA sponsored paper by Weick on propeller design drew widespread interest in government and amateur experimenters. NACA recruited Fred to design a full scale prop test tunnel. This called for sizes four times greater than any in existence at NACA—power greater than both Newport News and Hampton power plants could supply—plus a few more small problems.

With the use of the new tunnel, it was found that a properly designed cowl for the exposed radial engines reduced the drag three to one. Weick developed this into a series of NACA cowl designs for industry. Fred Weick got his first aircraft design introduction by helping in the design of the aircraft for the New York to Paris race, only to be eliminated by an unknown from St. Louis by the name of Charles Lindbergh (1953 Guggenheim medalist).

Weick recruited three other NASA engineers in 1936 to start a venture to design and build an aircraft simple enough for anyone to fly and safe enough to fly itself. In 1940, the production Ercoupe resulted. It was an immediate success, incorporating his design of the tricycle landing gear

with steerable nose wheel. The first large commercial aircraft to incorporate this approach would be the Douglas DC-4.

Piper Aircraft called Weick in 1956 to form a new development center, which spawned a long series of successful business and private aircraft and serve as director and chief engineer. Retirement in 1969 did not slow Fred; he continued for many years as a consultant and expert witness in the courts, confirming aircraft designs. In addition to the Pawnee, Weick co-designed Piper's Cherokee line of personal and business lightplanes.

Weick died on Thursday, July 8, 1993, in Vero Beach, Florida.