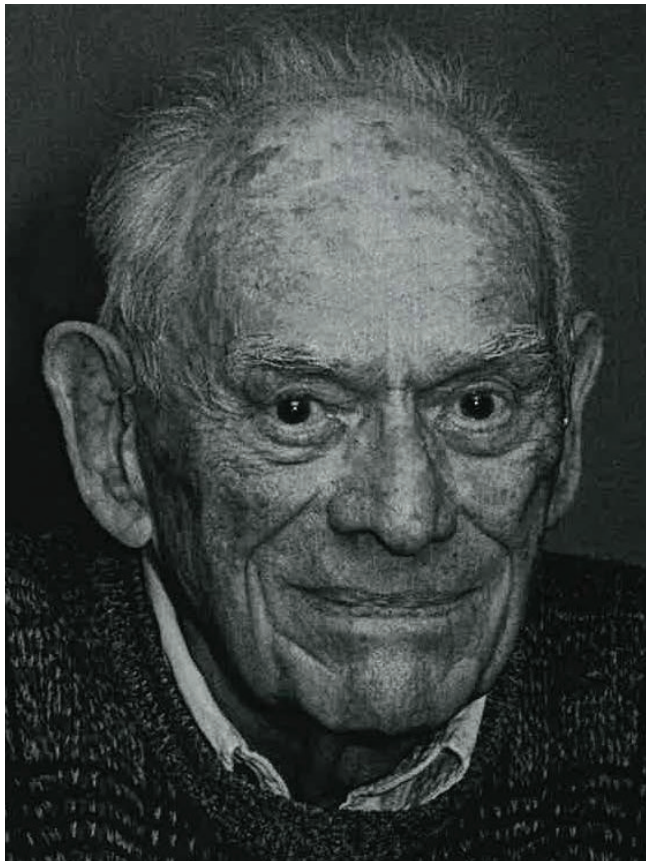

RICHARD SCHERRER

1919–2018

Elected in 2010

"For his pioneering work on revolutionary aircraft designs with extremely low radar cross sections that led to the F117A stealth fighter."

BY ALAN C. BROWN

RICHARD C. SCHERRER died December 21, 2018, at age 99. He was born August 30, 1919, in Seattle to Edith and Carl Scherrer.

He graduated from the University of Washington in 1942 with a BSc in aeronautical engineering and then joined the US Navy and worked with NACA Ames Research Center, where he continued to work until 1959. He conducted flight research programs with thermal deicing systems, and wind tunnel tests of supersonic aerodynamic heating and internal and external aerodynamics. He was also a member of the NACA Internal Aerodynamics subcommittee and assistant head of the 1′ × 3′ supersonic wind tunnel branch. He wrote a proposal to develop both a jet engine and an aircraft to test it, but this was never followed up.

Dick had a strong interest in high-powered cars, and at one time modified vehicles to improve their performance. That work involved him with a company called Arrow Development, which was also in the boardwalk type of roller coaster business. Arrow got a request from the Walt Disney organization to submit quotations for a number of rides for a new theme park, which was to become Disneyland, to be opened in Southern California.

Disney's written requirements were very similar to those used in government defense circles; Arrow was not used to this format, and asked Dick to help with the submittals. Disney had apparently sent out requests for quotations to practically every company in the country that had previously worked on these types of rides. Arrow Development's experience was primarily with the boardwalk at Santa Cruz, home of one of the last remaining wooden roller coasters in the country. Dick was happy to oblige, and the company won contracts to design five of the major rides—Dumbo, Mad Tea Party, Matterhorn, Little Train That Could, and Flying Saucers. This was a major shift for Dick, who did most of the design work on these rides.

He described his conversations with Walt Disney as being with someone he felt was a true genius—this from someone who worked with a very bright group of folks at NACA! The Matterhorn ride was particularly challenging, as it involved two separate tracks that had to cross each other a couple of times. Walt Disney insisted that at no time should the g-forces exceed −0.8, as he didn't want little old ladies coming out of their seats! The jobs were completed and are still running successfully over 60 years later.

Dick's interest in high-powered automobiles (for a long time he drove the then highest powered fastback Ford Mustang) was also expressed in the vacation vehicle he built for family tours. He bought an old school bus and replaced its rear drive engine with two top-of-the-line Buick V8s, each driving one of the rear wheels. It would give him great delight to allow sports cars to pass him on a hill, and then open up and blow them off the road!

In June 1959 he joined the Lockheed-California Company in Burbank. He was in the Advanced Design Department and worked on the Lockheed P-3 Orion and S-3 Viking aircraft, both of which were very successful in service. He was also the lead engineer for several aircraft proposals, including managing the initial design trade-off studies for the L-1011 Tristar commercial transport.

In pursuit of his side hobby, he was an active participant in the first and second AIAA symposia on the aerodynamics of

sports and competition automobiles, held in Los Angeles in 1968 and 1974.

In February 1975 he was recruited by Ed Martin, Lockheed-California Company's science and engineering director, to work as project manager in the Lockheed Skunk Works on the initial design of what became the Have Blue very low radar cross-section research aircraft. He, radar return computation expert Denys Overholser, and airplane designer Kenneth Watson hold the patent on Lockheed's initial entry in this competition with Northrop. Lockheed's winning design led to the award of the Lockheed F-117A contract by the US Air Force for what became the world's first successful stealth military aircraft.

During the summer of 1976 Dick suffered a stroke and had to leave the program. He returned to Lockheed a year later and continued to work on low-observable airplane designs. Bill Elsner, then USAF chief engineer for stealth programs, was quoted as saying in the mid-1980s that "there would never have been a stealth airplane but for the genius of Dick Scherrer."

Dick left Lockheed in September 1979 after a disagreement with management about whether his out-of-Lockheed-hours work on high-temperature ceramic combustion chambers for automobiles represented a conflict of interest. He joined Northrop and helped with the design of what became the B-2 Spirit Stealth Bomber. He worked on several projects for Northrop and associated companies, all in the general stealth airplane design area, and retired in 1991.

In 1995 Dick received the Distinguished Alumni Award from the Department of Aeronautics and Astronautics of the University of Washington, and in 2010 he was elected to the National Academy of Engineering. He was also an associate fellow of the American Institute of Aeronautics and Astronautics, having been a member for over 70 years.

He married Ruth Anita Clifford in September 1944. She preceded him in death in 2001. He is survived by his son Robert A. Scherrer and daughter Anna L. Scherrer, three granddaughters, seven great-grandchildren, and two great-great-grandchildren!