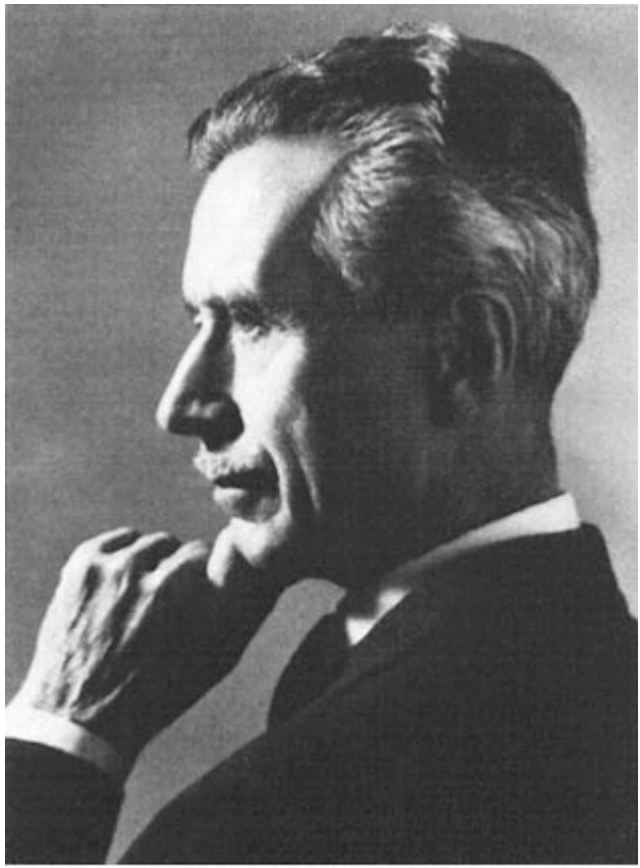

Fred N. Severud

1899–1990

By Anton Tedesko

Fred N. Severud was born in Bergen, Norway, on June 8, 1899, and died in Miami, Florida, on June 11, 1990. As one of the foremost structural engineers of his time, he left his imprint on many famous buildings, as well as a host of conventional structures. Severud was an innovator responsible for many unusual creative structural solutions. He was an excellent speaker who inspired complete confidence.

Severud graduated in 1923 from the Institute of Technology in Trondheim, Norway. He married his college sweetheart, Signe Hansen, and they headed for the United States. Shortly after their arrival he obtained a position with an engineering company, where he advanced rapidly. After several years he decided to start his own engineering practice, was recommended for a major housing project, and made his reputation as a troubleshooter for buildings that had developed problems. He found satisfaction in developing engineering solutions to difficult problems. It seemed that in his structural engineering there was always at work a good bit of ingenuity and intuition. He learned many lessons from nature, observed for instance the structure of flowers, and applied this knowledge to structural design. He pioneered many new structural systems and was respected for his structures, which stand today in fine condition.

Among the innovations introduced by Severud was the cable-supported roof. He applied the principles known and used for

suspension bridges to buildings, such as the Raleigh, North Carolina, Livestock Judging Arena; the Yale University hockey rink; and Madison Square Garden.

Quite a few of the structural designers in Severud's office had attended European universities, where they received a much broader education and training than was then obtainable by students in American technical universities. Initially, Severud's firm was known as Severud-Elstad-Krueger; Elstad had come from Norway, Krueger from Germany. Twenty years later, the name of the firm had changed to Severud-Perrone-Sturm-Bandel, and eventually this was shortened to Severud Associates.

The Severud firm on its own or in collaboaration with well-known architects created a number of stunning projects, such as the Place Ville Marie Center in Montreal, and the superb City Hall Complex in Toronto. Severud was the favorite engineer of several prestigious architects known for their contemporary work. He cooperated with architect Eero Saarinen on the design and the supervision of construction of the Gateway Arch, a 630-foot-high stainless steel sculpture on the bank of the Mississippi River at St. Louis.

The American Institute of Architects elected Fred N. Severud an honorary associate member in acknowledgment of the creative stimulus derived by the profession from his leadership in structural design and engineering. A fellow of the American Society of Civil Engineers, he received numerous other honors, such as the Earnest E. Howard Award of that society, and the Frank P. Brown Medal of the Franklin Institute for outstanding engineering accomplishments. In 1968 he was elected a member of the National Academy of Engineering.

Severud was the author of several books on architectural and engineering subjects, and on the safety under nuclear blast. He wrote many technical articles that appeared in professional journals. Severud frequently lectured to groups of architectural students. The multitude of his technical skills was unusual, as was his skill in human relations. He will be remembered not just as an outstanding engineer, but as a man who cared about his fellow man and showed this concern by his actions.

Severud retired from his firm in 1973. Upon leaving he gave

up all engineering-related contacts and activities and spent his time and efforts entirely on behalf of a Bible-oriented religious organization.

Mr. Severud is survived by his daughters, Laila Shalkoski and Sonja Susich, and by his son, Fred Severud, Jr., a civil engineer-member in the Severud firm.