



The AMA History Project Presents: Biography of JOHN W. BRODBECK, SR.

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The following biography was published in the April 1978 issue of Model Aviation magazine after his induction in the Model Aviation Hall of Fame.

John W. Brodbeck, age 62, is the “B” of K&B Manufacturing Company in Downey, California. He is a pioneer in model power plant development, a dedicated modeler, and a supporter of the AMA, as well as a Nats sponsor of long standing.

John was a West Coast “Admiral” in the 8-Ball Club, originally a fundraising organization formed to meet the AMA financial deficits during the 1950s and 1960s. He directed the annual Far East Championships in Japan for the U.S. Air Force from 1956 through 1970, from which winners were brought to the U.S. to compete in the AMA Nationals.

His company is one of very few American engine manufacturers to remain in business by meeting foreign competition in performance and price – K&B Engines have powered championship-winning models for many years since his pioneering engine designs in the 1930s. Brodbeck’s infant engine of the 1940s made small models practical at a price youngsters could afford and was influential in attracting untold thousands of newcomers to model aviation.

He initiated an engine repair service at major contests, free of charge to contestants. This has permitted many competitors to win championships where they may have otherwise been unable to continue competition.

Betty Stream of the B.I.R.D.S. Club, endorsing Dick Tichenor’s nomination of Brodbeck, said, “John Brodbeck has been overlooked for too long a period of time. He has been active as a Nationals sponsor, and in HIA and in SCHIA [national and local hobby industry associations.] He has been a real friend to modelers all over the world, but here in Southern California he is revered and respected – always ready to help in any and all activities, including donations, programs for clubs and support of contest activities. John is a wonderful person as well as an integral and important part of modeling, past and present.”

Johnny Brodbeck’s nomination to the Hall of Fame was a popular choice, supported by many people. His election makes official what was regarded as his natural place in modeling history.

The following was published in the February 2005 issue of Model Aviation magazine, page 160, after John's passing.

John Brodbeck, Sr., often known as “Mr. B,” passed away at his home in Lake Havasu City, Arizona. The “B” in K&B Manufacturing, John was inducted into the Model Aviation Hall of Fame in 1977 and the North American Model Boat Association (NAMBA) International Hall of Fame in 1982.

John began aeromodeling in 1936, using a Brown Junior engine. Unhappy with the performance of the engine, he made some modifications to it, as did many early modelers. He thought of making his own engine, but World War II began and he went to work at California Machining, eventually working his way up to general manager.

John met Lud Kading, the “K” in K&B, during a car trade and eventually the two began flying models together. Lud was John’s first choice to run the tool shop at California Machining and both worked there for the duration of the war.

John still dreamed of building his own engine, and as World War II was winding down, they decided to start their own business, doing whatever machining work came their way.

K&B Manufacturing built cannon yokes for Lockheed and made precision-machined parts for a government project – 12 hollow balls, two inches in diameter, of the purest aluminum available. The balls had extremely close tolerances and no other company had been able to reproduce them.

After the war, they were informed that the precision-machined parts were the cores of the Manhattan Project.

John and Lud saved and finally had enough working capital to begin making their engines. K&B based the .29 engine on the old Torpedo design.

An old friend, Bill Atwood, purchased the rights to the old Torpedo and Bullet engines, but was no longer interested in producing them. John purchased the name and some old inventory from Bill.

“It’s had a lot of ups and downs,” John once told John Worth, former AMA president and executive director, in an interview, “but I was thrifty, and we always had working capital.”

In 1946, they built their first engine – the Torpedo – that hit the hobby shops the following year. They began experimenting with a tiny .10 engine but had little luck. They doubled the displacement to .20, but the existing glow plugs were still too large for the size of the cylinder. *[Editor’s note: Based on National Model Aviation Museum staff research and consultation, we believe this should be .020, not .20.]*

John came up with the idea for his “capsule plug,” which was a one-piece combustion chamber and plug, and they got it to work. There were no kits or propellers available for an engine that small, so they had to design their own. John and Lud developed a 4.75-inch bent-aluminum

propeller and manufactured it themselves to maintain the secrecy of the project.

They decided to make a run of 10,000 Infant Torpedo engines and announced the product after they had produced the first 3,500. One week later, they had orders for 280,000 engines!

John and Lud spent the next year trying to meet the demand for the small engine. Roughly 400,000 were produced in all.

K&B introduced .035 and .049 engines that became more popular than the .20. *[Editor's note: Based on National Model Aviation Museum staff research and consultation, we believe this should be .020, not .20.]* John and Lud were fortunate to be involved in the industry during a period of growth and innovation, and they had the skills and talent to take advantage of it.

Lud Kading left the company but John never removed the “K” from K&B. The two remained lifelong friends. John ran the company himself before finally turning the leadership over to his son, John Brodbeck, Jr.

K&B was eventually sold but the engines continued to be sold under the K&B name, making the company the longest continuous manufacturer of model engines in the United States. K&B Model Products, Inc. continues to be one of the premier American model engine manufacturers.

John credited the success of K&B to keeping up with technology. The company was in the forefront of CNC innovations, enabling it to turn out engines faster while still maintaining the quality.

“The industry’s been good to me,” he told John Worth. “If I had to do over again, I’d do the same thing.”

John is survived by a daughter and son-in-law.

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