



The AMA History Project Presents: Biography of EDWARD DANIEL (DAN) CALKIN



Written by AMA Staff (01/2001); Edited by JS (12/2005); Updated by JS (05/2014)

The following biography, written by the AMA staff, was published in the February 2001 issue of Model Aviation magazine. Dan received the 2000 Model Aviation Hall of Fame award post-mortem.

A book about Dan Calkin was published in 199 by John J. Brown, titled Dan Calking and his ELFs.

Edward Daniel Calkin – 2000

Edward Daniel Calkin, deceased, built his first successful model aircraft engine when he was only 17 years old. His first Elf engine was sold in July 1935. [Editor's note: Edward Daniel generally went by the name "Dan". - May 30, 2014]

Subsequently, he devoted his life to the advancement of model aviation by pioneering the development of small engines. He was famous for the Corncob, Elf Single, Elf Twin, Elf Four, and Elf Six.

The smallest of these, Corncob, was specifically designed for the Texaco-type event. It would run approximately 42 minutes on an ounce of fuel!

Calkin graduated with honors for MIT in 1933 with a Masters degree in mechanical engineering.

Other technical achievements included the development and manufacturing of a small lightweight 1.5-volt coil, propellers, $\frac{1}{4}$ -32-size spark plugs, model aircraft engine-driven fuel pump, and an RC stick assembly for Jim Walker in 1940.

Calkin did considerable research into RC model airplane flight controls, developing both mechanical and pneumatic systems.

Calkin frequently contributed to the model magazines of the day, most notably *Model Airplane News*. Elf-powered airplanes were common in publications such as the 1938 *Model Aeronautic Yearbook* by Frank Zaic.

The longest manufacturer of engines when his shop closed in 1956, he devoted himself to a new career working as a scientist at Douglas Missile Division in Santa Monica, California. He created mathematical models for missiles used to design the guidance systems.

His peers considered him a near-genius and he was highly respected.

After his retirement, he was known to say that he got the most satisfaction in life from making

the Elf engines! During his Douglas days and until his death, he devoted himself to developing a Radio Control system. Ever the perfectionist, he never got it to work to his satisfaction.

Calkin served as a judge at many contests. He worked tirelessly to obtain positive publicity for the hobby/sport, as well as encourage youth participation. His reputation as a master craftsman and engineer survive, along with this legacy of the Elf engine.

Irwin Ohlsson stated that Elf engines were “built like a watch!”

This PDF is property of the Academy of Model Aeronautics. Permission must be granted by the AMA History Project for any reprint or duplication for public use.

AMA History Project
National Model Aviation Museum
5151 E. Memorial Dr.
Muncie IN 47302
(765) 287-1256, ext. 511
historyproject@modelaircraft.org

