



## The AMA History Project Presents: Biography of DAVID GRAY



Written by AMA staff (10/2008); Formatted by JS (01/2009), Reformatted by JS (08/2009)

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*The following was published in the January 2009 issue of Model Aviation magazine. David was a 2008 Model Aviation Hall of Fame inductee.*

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David Gray is credited with inventing and flying the first Radio Control helicopter in 1970. The Smithsonian's National Air and Space Museum has David's original model on display.

David began modeling early, building his first model aircraft – a 25-cent *F6F Hellcat* – when he was only seven years old. Because of the scarcity of material during World War II, David began designing and building his own models, often with better results than what was offered at the time.

His family moved to Michigan, and in the garage of their new house, David discovered a box full of built-up, rubber-powered airplanes and an old Rodgers engine. He rebuilt one of the airplanes, a 36-inch *Stuka* – and flew it with great success.

A comic strip called *Tim Tylers Luck* piqued David's interest in radio-controlled models. To be able to fly an airplane without wires and actually control it with radio signals was far more science fiction than reality at the time, but it became David's goal.

This desire led to experiments with electric-powered airplanes, cars, and boats. Fueled with a hand-held lantern battery and tethered with fine strands of copper wire, the models were steered with actuators and escarpments.

In 1958, David married and began working for various electrical supply firms, adding to his knowledge of electrical motors. In 1963, he moved back to Michigan, took a part-time job with Glass City models, and was excited to actually be paid for fabricating parts and assembling pulse radio equipment!

Two years later, David started his own company, Airtrol, where he designed and marketed an improved pulse-radio system. Throughout he was experimenting with radio-controlled models from cars to autogyros, and helicopters began to interest him more.

Dave began experimenting with foam and plastic aircraft and building his own vacuum-forming machines. He left Airtrol to join Jim Merrill and open a new business called Gramer Plastics, which produced foam aircraft and packaging products for the automotive industry.

David's helicopter prototypes began to show results. In 1970, at the Radio Control show in Cincinnati, Ohio, he demonstrated his .40-powered Radio Control helicopter, which made the cover of *Model Airplane News*. This model is housed at the Smithsonian.

Dewey Broberg, president of Du-Bro, asked to buy manufacturing rights from David. Within several months, David and his family moved to Mundelein, Illinois and he began working for Du-Bro to further develop his helicopter design. After much work and numerous setbacks, the Du-Bro *Whirley Bird 505* was produced.

The *Whirley Bird* enjoyed great success and David began working on a larger, better-flying aircraft. The semiscale *Hughes 300*, powered by a 1.34 cu. in. O & R engine, was the result. Easier to fly and more realistic looking, the *Hughes 300* led to the design of two more helicopters: the .40-powered *Tri-Star* and the *Shark .60*.

David and his helicopters have been featured in numerous publications including *Model Airplane News*, *R/C Modeler*, *Popular Mechanics*, and *Flying Models*. He has continued to work with Du-Bro, designing equipment for the aeromodeling industry, and is still an integral part of the company's design team.

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