The AMA History Project Presents:
Autobiography of
CHARLES DAVID (DAVE) GIERKE
Born November 2, 1941  Modeler starting in 1948
AMA #35977
Written & Submitted by CDG (11/2002); Transcribed & Edited by SS (12/2002)

Career:
- Wrote his first magazine article in 1967 for American Modeler about his Novi Control Line Stunt design
- Designed, built and competed with many Control Line and Radio Control models throughout the late 1960s and the 1970s
- Some of his designs include Novi III & IV (Stunt), All American Eagle (Stunt), XP-40Q (Radio Control Pylon), Blue Flame (Radio Control Open Pylon), Brazen Raven (Radio Control Pattern), Northern Eagle (Radio Control Sport), and Eclipse (Radio Control Pattern)
- Developed experimental apparatus and techniques used to understand and improve miniature engines
- Became a contributing editor to Model Airplane News in 1992; write the “RPM” (Real Performance Measurement) column
- Published a book, Two-Stroke Glow Engines for RC Aircraft, in 1994
- Won the high appearance point’s award (Stunt) at two AMA Nationals
- Placed first 13 times at the Toledo Weak Signals Radio Control Expo

Honors:
- 1978: New York State Teacher of the Year
- 2002: Model Aviation Hall of Fame

Dave Gierke, 61 (as of 2002), like many youngsters of his generation, started building model airplanes early – rubber band powered stick models – at the age of seven. He obtained his first engine, a used sparker converted to glow, and learned to fly Control Line in 1952. Dave joined AMA in 1956 when he entered his first contest.

Concentrating on Control Line Speed and Stunt, Dave authored his first magazine article in 1967 (American Modeler magazine), chronicling his Novi Control Line Stunt design. Over the next decade Dave designed, built and competed with a multitude of new models in Control Line and Radio Control – many of which were published in various model magazines; some of these include: Novi III & IV (Stunt), All American Eagle (Stunt), XP-40Q (Radio Control Pylon), Blue Flame (Radio Control Open Pylon), Brazen Raven (Radio Control Pattern), Northern Eagle (Radio Control Sport) and Eclipse (Radio Control Pattern)

Always interested in the technical aspect of the hobby-sport, Dave developed experimental apparatus and techniques that he used to help understand and improve miniature engines; several of these he described in technical articles, including: Dynamometer – For Engine Performance Analysis (three parts); Two-Stroke Oils: Their Analysis; The Effects of Atmospheric Conditions on Engine Performance; and The Power Factor.

In 1992, Dave became a contributing editor for Model Airplane News magazine; his column, “RPM” (Real Performance Measurement) provides answers to problems associated with the design, operation, and maintenance of our engines. Dave’s book, Two-Stroke Glow Engines for
RC Aircraft (1994), continues to receive enthusiastic reviews from readers across the spectrum of model aviation, contributing useful information to beginners and experts alike.

Always the perfectionist, Dave won the high appearance point’s award (Stunt) at two AMA Nationals and first place 13 times at the Toledo Weak Signals Radio Control Expo with his models. As an educator, Gierke credits model airplanes for helping to motivate his high school students to many science and engineering achievements over his 34-year career; Dave was designated, New York State Teacher of the Year in 1978.

### Designer

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### Experimenter

- Since 1969, I have developed and refined a torque reaction dynamometer used in research for competition Pylon racing and my engine test reviews for Model Airplane News
- Researched and discovered the plasticizer for lacquers and dope (Monsanto Santicizer 141, marketed as Flexall)
- Developed a lightweight servo for Control Line Stunt throttle and brakes (“Control Line Stunt Throttle and Brake System, Model Airplane News, August 1968)
- Invented the bubble-less tank (positive expulsion) (“Super Tank”, Model Aviation, August 1977), used by all Pylon racers and most Pattern flyers
- Perfected the load factor for propellers (“Airframes and Prop Selection”, Model Airplane News, July 1999), used to determine propeller load RPM
- Developed the power factor for engine load/RPM comparison (“The Power Factor”, Model Airplane News, September 1999)
- Invented the roller-clutch starting system for prop-driven engines (2000) (Not yet on the market)
- Inventor and patent holder for a cold weather starting system (2001) (Not yet on the market)
- Currently (since 1999) working on fuel injection for miniature engines

### Author

Books:
- Two-Stroke Glow Engines for RC Aircraft (1994)
Articles:

- “A Place For Lace,” *Flying Models*, February 1972
- “Dynamometer – For Engine Performance Analysis” (three parts), *Flying Models*, June, July, August 1973
- “Setting the Idle...Safer Landings,” *Model Airplane News*, September 1995
- “RPM – Fifty Years of Fox Engines,” *Model Airplane News*, November 1997
- “The Power Factor,” *Model Airplane News* magazine, September 1999
- “Cool it! Temperature Tuning,” *Model Airplane News*, April 2002

(signed) C. David Gierke
March 2003