
Autobiography of CHARLES DAVID GIERKE

Modeler since 1948

Birth Date: November 2, 1941

AMA Number: 35977

Written & Submitted by CDG (11/02)

Transcribed & Edited by SS (12/02)

Career:

- Wrote his first magazine article in 1967 for American Modeler magazine about his Novi Control Line stunt design
- Designed, built and competed with many Control Line and Radio Control (RC) models throughout the late 1960s and the 1970s
- Some of his designs include Novi III & IV (stunt), All American Eagle (stunt), XP-40Q (RC pylon), Blue Flame (RC open pylon), Brazen Raven (RC pattern), Northern Eagle (RC sport) and Eclipse (RC pattern)
- Developed experimental apparatus and techniques used to understand and improve miniature engines
- Became a contributing editor to Model Airplane News magazine 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 RC Expo

Honors:

- 1978 – New York State Teacher of the Year
- 2002 – AMA Hall of Fame

Dave Gierke, 61 (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 (RC) – many of which were published in various model magazines; some of these include: Novi III & IV (stunt), All American Eagle (stunt), XP-40Q (RC pylon), Blue Flame (RC open pylon), Brazen Raven (RC pattern), Northern Eagle (RC sport) and Eclipse (RC 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 RC 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

American Modeler magazine	Novi (Control Line stunt)	Oct. 1967
Flying Models magazine	Novi III (Control Line stunt)	Feb. 1968
Model Airplane News magazine	All American Eagle (Control Line stunt)	July 1968
Flying Models magazine	Novi VI (Control Line stunt)	May 1970
Flying Models magazine	Brazen Raven (RC pattern)	May 1971
Flying Models magazine	Dee-Kay Special (RC pylon Formula 2)	June 1971
Flying Models magazine	XP-40Q (RC pylon Formula 2)	March 1972
Flying Models magazine	Blue Flame (RC pylon open)	April 1973
Flying Models magazine	Northern Eagle (RC pattern)	Sept. 1973
RC Sportsman	Eclipse (RC pattern)	June 1975
RC Sportsman	Miss San Bernardino (RC pylon Formula 1)	Oct. 1975

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 Santisizer 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 bubbleless 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

- Book – Two-Stroke Glow Engines for RC Aircraft (1994)
- Book – RC Pilots Handbook: Chapter 11, "Maximizing Engine performance" (1994)
- Book – Ultimate RC Flight Guide: Chapter 6, "Getting the Most from Your Engine" (2002)
- "Langley's Steam Powered Models," Aviation History magazine (July 1998)

- “Dry transfers – Lettering and Rivets,” Flying Models magazine (July 1968)
- “Control Line Stunt Throttle and Brake System,” Model Airplane News magazine (Aug. 1968)
- “India Ink Is Magic,” American Aircraft Modeler magazine (June 1970)
- “A Place For Lace,” Flying Models magazine (Feb 1972)
- “Dynamometer – For Engine Performance Analysis” (three parts), Flying Models magazine (June, July, August 1973)
- “Two-Stroke Oils: Their Analysis,” Model Airplane News magazine (May 1974)
- “The Effects of Atmospheric Conditions on Engine Performance,” Model Aviation magazine (January 1976)
- “Super Tank,” Model Aviation magazine (August 1977)
- “Breaking-in Lapped and Ringed Piston Engines,” Model Airplane News magazine (September 1994)
- “Voodoo Mechanics: Engines, Energy and Physics,” Model Airplane News magazine (July 1995)
- “Setting the Idle...Safer Landings,” Model Airplane News magazine (September 1995)
- “HEY! Keep the Noise Down! Reduce dB With Available Silencers,” Model Airplane News magazine (December 1995)
- “Control Port Technology,” Model Airplane News magazine (March 1997)
- “On-Board Accessories,” Model Airplane News magazine (April 1997)
- “Super Tank II,” Model Airplane News magazine (June 1997)
- “Keeping Your Stunt Engine Healthy,” Flying Models magazine (July 1997)
- “RPM – Fifty Years of Fox Engines,” Model Airplane News magazine (November 1997)
- “Airframes and Prop Selection,” Model Airplane News magazine (July 1999)
- “The Power Factor,” Model Airplane News magazine (September 1999)
- “The Century of Radio Control – Engines,” Model Airplane News magazine (December 1999)
- “The Future of R/C: Power,” Model Airplane News magazine (January 2000)
- “Vanquish the Varnish – Engine Cleaning,” Model Airplane News magazine (May 2000)
- “Muffler Operation,” Model Airplane News magazine (June 2000)
- “Engine Break-in,” Model Airplane News magazine (November 2001)
- “Cool it! Temperature Tuning,” Model Airplane News magazine (April 2002)

(signed) C. David Gierke
March 2003

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