



The AMA History Project Presents: Biography of PHILIP (PHIL) KRAFT

April 18, 1926 – April 9, 2006 Started modeling in 1935

AMA #15107



Written & Submitted by JB & DT (03/1976); Transcribed by NR (12/1999); Edited by SS (2002), Reformatted by JS (10/2009)

Career:

- First contest model aircraft was the rubber-powered Korda *Wakefield*
- 1938 – 1941: Won all contests entered in “Under 16” category
- 1962: Started own business in October 1962 with the Kraft Custom line of resonant reed equipment
- 1967: Won first place World Championships
- 1970: Became interested in full-scale flying
- 1972: Designed, built, and flew full-scale aircraft *Super Fli*
- Designed and published 19 radio-controlled designs including the *Kwik-Fli* and the *Ugly Stick*

Honors:

- 1978: Model Aviation Hall of Fame
 - 1978: Howard McEntee Award
 - 1978: Vintage Radio Controlled Society Hall of Fame
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The following biography was taken from two Model Aviation Hall of Fame applications. The applications were submitted by Joe Bridi (3/24/76) and by Dick Tichenor (3/10/97).

Philip O. Kraft

By Dick Tichenor – 1977

Personal History

Born: April 18, 1926

Married, Wife: Rae

Three children: Lynn, 15; Lorrie, 17; Virginia, 20.

Education: Graduated High School, Ojai, California, 1944; Received BS Degree in Business Administration, University of Southern California, 1951

Military Service: U. S. Navy 1944-46; 6"

Job History: Salesman for Lynn & Brooks, Manufacturers Representatives, 1953-1963; Founder and President of Kraft Systems, Inc., 1963 to date

Major Interests: Flying radio-controlled model aircraft; flying full-scale aircraft (pilot's license with instrument rating); active in acrobatic competition in Southern California area. Active photographer doing own color printing and developing. Active in collecting and restoring classic Ferrari sports cars.

Model Building History

1935 - Started with simple balsa solid scale models and small rubber powered models of all types. First contest model aircraft was the rubber-powered Korda *Wakefield*.

1938 - Entered first contest sponsored by the American Legion, Oxnard, California. Placed first in "Under 16" category.

1938-1941 - Won all contests entered in "Under 16" category. Designed own Wakefield-type models, gas-powered Free Flight models, and Gliders.

1953 - After completion of U.S. Navy service, education, and marriage, resumed modeling; was a regular winner in West Coast Free Flight contests and once won three or four classes at Taft annual contest.

1956 - Became interested in Radio Control early in 1956; single-channel low-wing, .049-powered *Gimlet* published *Model Airplane News* in 1956, and a single-channel biplane, .15-powered *Bi Fli* published *Model Airplane News* in 1959.

1956-59 - Became interested in Radio Control electronics because of limitations of available equipment. Self-taught, designed Kraft single channel receiver, published, *Model Airplane News* in 1959. This design became the most popular ever of its type. Design work for Ace Radio Control for kit lines, and another manufacturer for production equipment.

1962 - Started own business in October 1962 with the Kraft Custom line of resonant reed equipment.

1963 - Became a full time occupation in March of 1963.

1964 - Kraft Systems, Inc. became incorporated.

1964-68 - Started active multi-channel contest flying in 1964 with fourth place at the U.S. Nationals that year. Since then, have won almost every major contest in the world, including first in the 1967 World Championships, first in the 1967 and 1968 U.S. Nationals, three-time member of the U.S. World Team, winner U.S. Nationals 1966 in Goodyear Racing class, competed and demonstrated in many countries throughout the world, won Argentine National Championships, Australian National Championships and several contests in Mexico.

1970 - Became interested in full-scale flying.

1971-72 - Started acrobatic flying in 1971 with Pitts Special, won second in first acrobatic contest in 1972. Placed in several full-scale contests since that time.

1972 - Began design of full-scale acrobatic aircraft, *Super Fli* aircraft completed in 1975 and

campaigns actively in Unlimited competition and air shows by Steve Nelson of San Diego. Currently still active in Radio Control Pattern competition.

Magazine Articles and Designs

Hi-Fli: .15 powered Free Flight model, *Model Airplane News*, 1955

Up Start: Free Flight, various sizes, *Model Airplane News*, 1956

How to Adjust Free Flight: *Model Airplane News*, 1958

Gimlet: .049 powered, Radio Control, *Model Airplane News*, 1956

Gimlet – .049 powered, Radio Control low-wing, *Model Airplane News*, 1956

Bi Fli – .15 powered, single-channel escapement-operated biplane, *Model Airplane News*, 1959

Kraft Single Channel Receiver – *Model Airplane News*, 1959

Stagger Bi – .60 powered, multi-channel negative stagger biplane, first issue of *RC Modeler*, 1963

Kwik Fli I: *RC Modeler*, 1963

Kwik Fli II: *RC Modeler*, 1964

Ugly Stik: *RC Modeler*, 1965

Go Go Fli: Nationals winning Goodyear Racer, *RC Modeler*, 1966

Bar Fli: .60 powered, contest Pattern airplane, *Model Airplane News*, 1967

Kwik Fli III: World and National Champion winning aircraft, *Model Airplane News*, 1965

Flea Fli: .19 powered miniature multi-channel pattern airplane, *Model Airplane News*, 1968

Slick Fli: *RC Modeler*, 1969, *American Modeler*, 1969

Dragon Fli: multi-channel pattern airplane, *American Modeler*, 1970

Fire Fli: *RC Models and Electronics*, 1972

Super Fli: full-scale acrobatic airplane and model, *Model Airplane News*, 1976

Joe Bridi wrote the following information on March 24, 1976.

In the industry, Kraft Systems is the largest and most respected manufacturer of quality proportional Radio Control equipment. Its products are sold in virtually every country of the world, including several of those behind the Iron Curtain.

Phil Kraft, founder and president of the company, is probably the best-known figure in the entire sport. This is due both to his participation in the designing and manufacture of Radio Control equipment itself, the designing of many well-known aircraft and wins in all major contest events in the world.

Historically, from boyhood, Phil Kraft's hobby had been in the building and flying of model aircraft. Most modelers dreamed of controlling their recreations remotely and Phil was no exception. Early attempts at Radio Control were unreliable. Because of this, Phil decided to develop his own Radio Control systems and, although lacking in electronic knowledge, he studied diligently and soon acquired a sound basic electronic background.

His first electronic design effort was published in Model Airplane News in March of 1959. The design attracted the imagination of Radio Control enthusiasts and he was approached immediately with offers covering kitting and manufacturing rights. The unit was kitted on a royalty basis and soon became the most popular of its type.

Because of this success, further and more complete designs were developed and the kit line was expanded. The Kraft name became synonymous with advanced design, innovations, and reliability. During this period, Kraft was employed as a successful sales representative for a manufacturer's representative firm and Radio Control flying and electronic design were purely an interesting sideline and hobby.

In 1961, a newly formed electronic and hobby manufacturer retained Kraft to design a Radio Control line to be produced under the Kraft name and their own. Production began in 1961 but, unfortunately, in the opinion of Kraft, the quality of the line was inferior and damaging to his reputation.

Relationships between the manufacturing firm and Kraft were severed amicably, with the firm continuing to produce his designs but without benefit of the Kraft name. At this time, Kraft had developed and perfected an entirely new line of advanced Radio Control systems, which were to have been produced under license. Since many friends and acquaintances desired this new line, he decided to make a few units for them in his garage, strictly as a part time sideline. Production began in 1962 with employees consisting of one full time technician and two women assemblers working in their homes.

In a few months, the business had grown beyond the possibility of part time operation and Kraft decided to leave his lucrative position as a manufacturers' representative and to devote full time to the new business.

Although competition was quite intense, the small company grew rapidly. Kraft's 10 years of sales experience resulted in an emphasis on service, which, coupled with a superior product, insured success.

After a few months, the company moved from the two-car garage in his home to a small plant in South El Monte, California. Rapid expansion made incorporation desirable and Kraft Systems, Inc. being in 1964.

During this time, all Radio Control manufacturers were struggling to perfect proportional type radio systems as opposed to the positional self-neutralizing type then produced. In 1964, Kraft introduced the first reliable and practical proportional Radio Control system.

In 1966, the company moved to a new and much larger plant, also in South El Monte. The increased sophistication and diversity of the line made reliance on outside vendors for the plastic components necessary for the system very undesirable.

Charles Hayes was both a well-known modeler and experienced designer and toolmaker of precision plastic parts. He was approached by Kraft and agreed to participate in a new corporation. The purpose of the corporation was to provide Kraft Systems with the precision plastic components needed to further improve its line and to sell these components to competitive manufacturers. In addition, it was hoped that sometime in future, as time permitted, a proprietary line of accessory items could be developed.

Kraft-Hayes Products was incorporated in March of 1967 and expanded very rapidly, succeeding in supplying both Kraft Systems and many other manufacturers with servo mechanics, control stick assemblies, and other injection molded plastic parts. An industrial market of these items was also developed and increasingly becoming a more important part of the company's overall business.

Improved mechanical components supplied by Kraft-Hayes Products enabled Kraft Systems, Inc., to produce a new line in 1968 named the Gold Medal Series for Phil Kraft's win in the 1967 World Radio Control Championships. This line swept Kraft to absolute dominance in the Radio Control field, 1968 was an extremely profitable year due to the company's very low overhead. It was apparent that the volume level could not be maintained without both a new plant and increased managerial and supervisory overhead.

After a study of many possible plant locations, Vista, California, was selected because of an excellent labor market and pleasant living and working conditions. Early in 1969, the Move to his new facility was completed with little production loss and the retention of a majority of the key employees.

It has been a long time management goal to expand Kraft Systems into complete coverage of the Radio Control field in allied items. Many new accessory items have been introduced over the

years, which have developed into a complete proprietary accessory line. In 1975, the first of a new engine line, the Kraft .61, was introduced. For many years, Kraft Systems has also produced precision connectors for itself and O.E.M. accounts. Originally, Joe Martin, who headed the Multicon Corporation, brought the connector line into Kraft Systems.

In mid-1972, Kraft Systems, Inc. (along with the Kraft-Hayes and Multicon companies) became a part of the Carlisle Corporation of Cincinnati. Since then, Kraft Systems has expanded its facilities to a manufacturing complex of three buildings devoted almost exclusively to the design and Production of Radio Control products for hobby, sport, and industrial use.

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