



The AMA History Project Presents: Biography of VITO M. GAROFALO

April 9, 1921 – 1994 AMA #331457



Written & Submitted by AJG (03/1995); Transcribed by NR (12/1999); Edited by SS (2002), Reformatted by JS (08/2009)

Career:

- Display model builder for Comet Model Airplane Co.
 - Model designer for Comet
 - Manager and draftsman for Comet
 - Product designer for Testors Corp.
 - President and Owner of Tern Aero Co.
 - Airplane product designer for Hi-Flier Mfg.
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The following information was taken from a 1996 Model Aviation Hall of Fame application.

Accomplishments

Designed and developed Structo-O-Speed Construction; marketed successfully by Comet Model Hobbycraft, Inc. for many years.

Designed and developed Comet's line of *Redi-Flite* ready to fly model products; these were first marketed in 1962 and have been in continuous production to the present time.

Designed and developed a line of plastic engine-powered ready to fly Control Line airplanes for Comet.

Invented pushbutton starter for miniature engines for Comet; two versions were patented. One was the centrifugal pin type, U.S. Pat. 3,131,682. The other was the inclined step type, U.S. Pat. 3,159,154.

Designed and developed the first thin wall injection plastic molded fuselage with full airfoil aluminum wing ready to fly airplane for the Testors Corp. of Rockford, IL, Pat. 86,911.

Companies Worked for/Positions Held

Display model builder for Comet Model Airplane and Supply Co., Chicago, IL, from age 15 through 19, on part-time basis.

Model designer and draftsman for Comet Model Airplane & Supply Co., from 1941-1943.

Manager of Engineering Department and Chief Designer for Comet Model Hobbycraft, Inc., from 1948 to 1968.

Airplane product designer for the Testor's Corp., Rockford, IL from 1968 to 1970.

President and owner of Tern Aero Co., Inc., Chicago, IL from 1970 to 1976. Produced a small line of high-quality balsa construction kits.

Airplane product designer for Hi-Flier Mfg., Co., Decatur, IL, 1976 to 1980.

Freelance product designer (Aero Design Associates) from 1980 to July 1994.

The following is excerpts from the KAPA (Kits and Plans Antiquitous) Kollector newsletter.

Vito M. Garofalo had joined Comet after his return from service in WWII. Vito was a meticulous worker and an outgoing person as well.

Over the succeeding few years, Comet increasingly concentrated on flying scale rubber models. However, the mass market for such models was declining as plastic models and cheap 1/2A Control Liners began to flood the market. The *Struct-O-Speeds* were phased out and the more craftsmanly stick-and-tissue kits again became king, as they are to this day in Comet's line.

A number of Comet stick-and-tissue kits were (and still are!) carryovers of pre-war kits dating from 1936 to 1941. However, during Vito Garofalo's tenure as chief designer, there were also a number of new, well-designed kits introduced. Typical of these was his kit #3902, the Piper *Cub Cruiser* of 1963. After 32 years, this 30-inch wingspan model is still in the Comet line, listed in the current AHC catalog for \$13.95. A copy of this plan is included with the article. In addition to Vito's immaculate drafting, notice the helpful detailed photographic instructions for building the model step by step.

In 1970, Vito Garofalo left Comet to found a new company, Tern Aero Co., Inc., also located in Chicago. The first advertising for the new company appeared in February 1971. A single kit was offered, the *Gone Goose*. This was a non-scale 17-inch rubber-powered flying model that sold for \$1.25 postpaid. By March, another model was added to the line: the *Traveler* sailplane with a 24-inch wingspan and also priced at \$1.25 postpaid. In the next month, another new model was advertised, the *Starduster Sportplane*. This was a semi-scale single cockpit parasol, as pictured in the advertisements reproduced with this article. These three models continued as the sole Tern Aero entries for about a year. Then in April of 1972, the non-scale *Nighthawk*, *Skipper* and *Dipper* were added, along with the first flying scale rubber kit from Tern Aero. This scale job was the de Havilland *Tiger Moth*, Tern Aero kit #105. Its wingspan was 17 inches and it sold for \$2.50. The plan was very reminiscent of Vito's late Comet plans.

The kit included a plastic propeller and wheels that were tooled up to Vito's design. Additional scale models continued to be added during 1972 through 1974, including #107 Porterfield *Collegiate*, #109 Ryan *S-T*, #111 Curtiss *Robin* and #112 Aeronca *C-3*. All have a similar plan format and have wingspans of 17 or 18 inches (Walnut Scale). The 1974 Aeronca *C-3* plan

reproduced with this article is typical and makes an interesting comparison to Vito's late Comet plans, such as the 1963 Piper *Cub Cruiser* plan that is also reproduced here.

A Tern Aero advertisement published in November 1973 shows a new kind of model for the Tern Aero line. It was a double-size *Starduster* for single channel Radio Control (RC) and .020 engine, kit #401, called the *Super Starduster*.

Some time after the *Super Starduster* introduction, Tern Aero's national advertising ended. Subsequently Vito negotiated a deal with the Hi-Flier Manufacturing Co. of Decatur, Illinois, selling his business to them and joining them as chief designer.

Hi-Flier had been known for many years as a leading kite manufacturer. Hi-Flier had also been a model airplane kit manufacturer before World War II, offering a fairly extensive line of low-priced kits. These included 100 and 250 solids and three series of flying scale models, priced at 50, 100 and 250, with wingspans ranging from 10 to 30 inches. The prewar kit plans were drawn and signed with the personal logos of several different designers, including Jerry D Kit and Dot's Kit and some others less legible. Bill Hannan tells me that Hi-Flier employed a female kit designer at that time (presumably that would be Dot), a bit of a rarity before World War II.

The Hi-Flier slogan at this time was printed in the title block of the plans: "The World's Largest Manufacturers of Aerial Toys." A unique feature of the 100 and 250 flying models was a patented stabilizer incidence adjustment device that consisted of a stamped metal ratchet that was located in the fuselage where it was engaged by a pre-formed music wire pawl mounted on the leading edge of the stabilizer.

The 1975 Hi-Flier business plan was to offer the former Tern Aero kits under the Hi-Flier name and to extend the line by updating selected kits from Hi-Fliers pre-war line of 10 cents models. All the kits were to be packaged in a classy new Hi-Flier box, and this longer line of models was expected to provide a better base for sales to both hobby distributors and retail hobby shops.

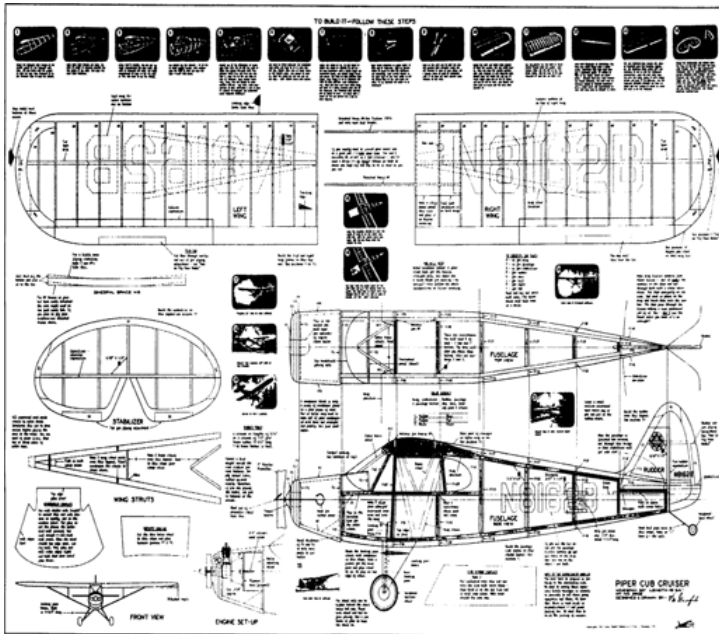
The former Tern Aero kits were easily converted to Hi-Flier by simply changing the title block on the drawing, removing the "T" from the plastic prop mold, and packing it in the new box. Underneath the Aeronca C-3 plan, you can see the two title blocks, which were the distinction between kit plans produced for Tern Aero and Hi-Flier kits.

Hi-Flier's second entry into manufacturing model airplane kits proved to be fairly short lived. When the kit manufacturing was discontinued, Vito left the model kit manufacturing industry. He returned to the Chicago area, where he continued doing product design outside the model industry until his retirement.

Vito and his wife Antoinette had three sons. One of the sons, Michael became vice president of operations for Waukegan Aero, a fixed-base operator located at the Waukegan Regional Airport just north of Chicago.

In 1994, Vito and son Michael went to the EAA Fly-in at Oshkosh, Wisconsin, flying a restored 1942 Vultee *BT-13*. Tragically, both Vito, age 73, and Michael, age 37, were killed in the crash of the *BT-13* while en route home from Oshkosh the evening of July 28, 1994.

Although kit designers were not generally as well known as designers whose plans and articles were published in the magazines, such talented men (and boys!) as Fred Schlienzy and Vito M. Garofalo created the kit designs that started many youngsters on a lifetime's enjoyment of model building and, in many cases, led them to their life's work.

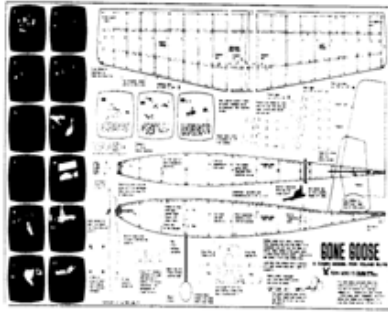


1963: Plans from Vito's Comet kit of a Piper Cub Cruiser.



Kits from the Tern Aero Company.

ABOUT TERN PRODUCTS--



Tern Kits are designed with the modeler's enjoyment in mind. They're more complete. Model building is a breeze when plans show everything, parts fit right and materials are top quality. And the flying goes better too, because your model is constructed from lighter balsa. You'll appreciate those Tern design features when your model's all finished.

TERN BEGINNER MODELS are ideal for familiarizing the young modeler with the needed basics—from cutting, sanding and cementing of parts to the happy flying of his completed model. Successfully too, because the wide margin of error designed into each model makes up for the shades of the inexperienced.



TERN SEMI-SCALE MODELS can be built in less time than the conventional scale model and yet have the finished appearance of an actual airplane. Each of these models has real flyability because of their sturdy construction and inherently stable design arrangement.

TERN SCALE MODELS fit into a new model category called Walnut Scale. As the popular Peanut Scale models have a wingspan limitation of 13", the Walnut Scale type has a maximum span of 18", allowing a proportional increase in size and flying performance. TERN engineered throughout.



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AERO CO., inc.

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CATALOG 100-75

A page from the Tern Aero Company's catalog.

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