

The AMA History Project Presents: Biography of VICTOR & JOSEPH (JOE) STANZEL



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The following biographical narrative about Victor and Joseph Stanzel was provided by Ted Stanzel. It was written in July of 2003 and revised in late 2006/early 2007, July of 2010, and May of 2011.

Dedication

To the memory of Victor and Joseph Stanzel, founders and co-owners of Victor Stanzel Company, who pursued their dream to design, build, and fly model airplanes; and to their mother, Agnes, who encouraged them.

Acknowledgement

As author of the Victor and Joseph Stanzel biography, I am grateful to them for offering me the opportunity to learn the model airplane manufacturing business. It has been my privilege to be taught by Victor and Joe, two of the great model airplane designers, artists, photographers, and manufacturers of their time.

I thank my dedicated office manager, Helen, who worked for the Stanzel Company over forty years and who greatly assisted me in typing and organizing this biography, and Melinda Barneycastle, a director of the Stanzel Family Foundation, for proofreading the biography and making grammatical changes.

In conclusion, the Board of Directors of the Stanzel Family Foundation and Model Aircraft Museum express appreciation for the excellent work by Dale Kirn in construction of Stanzel gas powered model airplanes and amusement rides on display in the museum.

Foreword

Victor and Joseph lived on the family farm near Schulenburg in South Central Texas. In 1918, when the boys were eight and two years of age, their father died and their mother moved from the farm to the new residence in town. They grew up as average farm boys working for their Uncle Ferdinand and Aunt Anna.

At an early age, Victor started his hobby, carving balsawood into toy airplanes in the bedroom of his mother's residence. He developed his curiosity about flying model airplanes observing birds in flight while working in the field.

His first major project, working with his brother Joseph, was to design and build a full-scale two-

seat aircraft, which was completed and patented in 1933.

The second major project was a full-scale rocket ship, the 20th Century Stratus Ship, completed and patented in 1937. Victor and Joe changed course in 1938 and designed gas-powered control line models. Their first, the Tiger Shark, was completed in 1939. It was followed by a series of different model airplanes. They believed it was no longer popular to build gas-powered airplanes. The brothers began designing ready-to-fly model airplanes, which continued until 2001. Throughout the 1990s, until his death in 1997, Victor developed a control line electric airplane utilizing his patented monoline control system.

Joseph and Victor Stanzel established the Stanzel Family Foundation in 1989, one year before the death of Joseph in July of 1990. The Board of Directors fulfilled the brothers' mandate to construct the foundation building in Schulenburg and provide space for the Stanzel Model Aircraft Museum.

The Foundation building and museums were opened in 1998. Subsequently, the Stanzel Brothers Factory Museum was established in the original factory building in 2005 and moved to its present site.

The primary objectives of the Stanzel Family Foundation, Inc. are to provide educational opportunities and to enhance the health and well-being of the residents of the Schulenburg and Weimar communities.

-Theodore Stanzel

Victor and Joseph (Joe) Stanzel: A Biography

Birthplace

Victor, Reinhart, and Joseph (Joe), the three sons of Edward and Agnes Stanzel, were born on their family's 90-acre farm, one mile east of Schulenburg, Texas, along Highway 90.

Victor was born on January 23, 1910, Reinhart on August 23, 1914 and Joe on November 29, 1916. Their parents worked the land until their father, Edward, passed away in 1918. There was no one to perform the physical labor, so their mother moved the family into a newly constructed residence at 1201 Lyons Avenue in Schulenburg, across the street from Saint Rose Catholic Church. The family was Roman Catholic; their mother taught the boys a sense of dedication and adherence to Catholic teachings. They were enrolled in St. Rose Parochial School, were taught by nuns, and learned to serve as altar boys.



C. 1917: Victor Stanzel (back); Joe Stanzel (left) and Reinhart Stanzel



The "new" Stanzel residence, constructed in 1919, adjacent to St. Rose Roman Catholic Church.

Life on the Farm



The Stanzel residence ("Farm Home"), birthplace for Victor and Joe Stanzel.

In their early years, the boys remained close to farm life under their Uncle Ferdinand's supervision (their father's brother), who worked the 100 acres adjacent to their home. The boys' grandparents, Franz and Rozina Stanzel, who arrived from Austria in 1873, owned the land. Victor and Joe received fatherly advice and guidance from their "Uncle Ferd." They helped him plow, plant and harvest cotton and corn, milk cows and feed the animals.

They learned early in life that farming required hard work and long hours. One can be sure their experiences taught them discipline and a strong work ethic that remained a guiding force throughout their career in model aviation.

When Victor was in his teens, in the mid-1920s, prospects were limited for a creative-minded young man. He had no funds to attend a University and the country's economic conditions were poor.

Victor had a curious mind, especially about airplanes and birds, which he observed flying overhead as he worked in Uncle Ferd's cornfield. He watched birds gliding, flapping their wings and banking turns as they changed direction in flight. He was curious to learn the flying habitats of birds and their ability to maneuver through the sky. He was also mesmerized by World War I airplanes from the San Antonio Army Air Base out on cadet training missions, flying over Schulenburg's skies. The airplanes they piloted were like the models he would soon begin to sketch, then draw to true scale and construct solid ornamental models from balsawood.

Victor did not attend high school, which was normal for the majority of farm boys. He realized he was not technically educated to accomplish his dream, to design and build large amusement

park rides and games. He was 15 years of age when he successfully completed correspondence courses in drafting, mechanical drawing, Algebra II, physics and practical mathematics through the American School in Chicago. In 1927, at 16 years, he continued with courses in tool making, machine shop work, strength of materials and machine shop management.

True Scale Models

In the early 1920s, Victor began hand carving true scale ornamental airplanes from solid balsa wood. Victor began his first commercial venture in the family residence constructing solid models of the 20-inch Curtis Falcon AC-3. Finished models were sold to flight cadets training at Kelly Army Air Force Base for twenty dollars. He learned from trade magazines that there was strong competition for true-scale models. Victor knew he must finish each airplane



A Curtiss Falcon AC-3

to perfection to out-sell the competition. His early discipline now began to reap benefits.

Beginning in the mid 1920s, Victor subscribed to magazines such as *Popular Aviation*, *Model Airplane News (M.A.N.)*, *Air Aces*, and *Aero Digest*. He realized it was important to remain abreast of this relatively new field of aviation, as it intrigued him.

Victor knew that, to be successful, advertising was important for his new career in model aviation. In 1932 and 1933, he began to run advertisements of his true-scale ornamental models and kits in *M.A.N.*, *Popular Aviation*, and *Aero Digest*.

Joe's contribution to Victor's model airplane construction business was limited. Joe continued fulfilling his responsibilities on the farm as he progressed through his high school years. He was an exemplary student at Schulenburg High School, on the varsity athletic team for four years, and graduated in 1933. When he reached this milestone in his life, the time had come for Joe to contribute full-time to Victor's aircraft construction projects.

In the early 1930s, Victor and Joe set up an assembly process. They manufactured the parts for each airplane and packaged educational construction kits for modelers.

Solid Model Airplanes

Victor and Joe sold kits of solid model airplanes, like the ones listed below:

- U.S. Army Curtis *Hawk P-6-E*
- U.S. Navy Curtis Goshawk
- U.S. Army Boeing *P12-E*
- U.S. Navy Boeing *F4-B4*
- Gee Bee *Sportster*
- Curtis *Falcon AC-3*
- Curtis *Hawk P-36*



1932: This full-sized airplane, called the Fly-A-Plane, was designed and built by Victor and Joe Stanzel.

A total of 14 different solid model kits were produced, which consisted of seven airplanes of varying sizes and wingspans. In 1931, Victor and Joe hired two employees to manufacture their kits and sell them by mail order.

As early as 1929, Victor made plans to expand the business beyond true scale construction kits by developing full-scale amusement park attractions. Joe was only a freshman at Schulenburg High School. Victor, 19 years old, prepared for the coming challenges by enrolling in refresher correspondence courses in aircraft design and drafting. He read books and science magazines to gain knowledge required to build a passenger carrying aircraft.

The first major project was the design and construction of a full-sized electric powered airplane, modified as an amusement ride. He named it the "Fly-A-Plane Amusement Ride." The aircraft consisted of a two-passenger conventional high-wing cabin-type airplane, attached to one end of a supporting beam, mounted on a stand-like support that allowed the beam to revolve with the airplane. When completed in 1932, they stationed it along a well-traveled road near town and offered rides for twenty-five cents. Joe served as pilot of the aircraft.

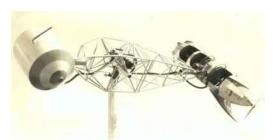
Later, it was located in a Houston park and eventually sold to an amusement park in Kilgore, Texas. Victor received his first patent for the "Fly-A-Plane Amusement Ride" in December of 1933.

After graduating from high school in 1934, Joe joined his brother in the business as co-partner. The manufacturing of true scale kits continued as design and construction of amusement rides progressed.

The sale of model airplane construction kits required an expanded work force to manufacture and market the products. The different scale models increased to fourteen kits in the 1930s.

Amusement Rides

Victor's first major accomplishment in passenger aircraft design was an engineering success. It inspired him to design an unconventional Buck Rogers rocket ship amusement ride, which he called the "20th Century Stratos-Ship." The company required manufacturing space to proceed. In 1935, Victor and Joe constructed a small wood frame, 30-foot by 60-foot factory building.



1936: This six-passenger, rocket-like ship, the Stratos-Ship, was designed and built by Stanzel brothers and Emil Barborak.

Victor and Joe, with associate Emil Barborak, established Stanzel-Barborak & Company. Together they completed the six-passenger rocket-like ship, mounted on a common axis that could rotate, and revolved in an angular plane. Propelled by a five horsepower electric motor, the Stratos-Ship whirled, spun, and looped with passengers experiencing a thrill of their life.



1940: The Stanzels' amusement park ride, the G-Ride, had four propeller-driven ships powered by an electric motor.

The "Stratos-Ship" was completed in 1936. It was an immediate success at the 1936 Texas Centennial in Dallas, the Great Lakes Exposition in Cleveland, Ohio, and the New York World's Fair.

Victor and Joe completed their third amusement ride in 1940. It consisted of four propeller-driven ships, each connected to the end of a hanger. An electric motor rotated the propellers, causing the support structure, hanger, and ship to rotate as a unit above the

spindle. The brothers received a U.S. patent for this ride in April of 1941.

Game Playing Device

Victor began designing an amusement apparatus, or gameplaying device, which consisted of a framed box with a curved bouncing plate and scoreboard. Magnetic balls dropped from an upper position onto the bouncing plate and into the scoreboard. The game was successfully completed but never marketed. The U.S. Patent Office issued a patent in 1941.



An amusement game-playing device with magnetic spheres and scoreboard, designed by Victor Stanzel.

G-Line Control Aircraft

In 1939, Victor and Joe began phasing out the business of aircraft amusement rides and amusement games. They proved their design capability and engineering construction expertise in the field of unconventional amusement rides and games. Even so, the ten-year venture proved only marginally successful. It proved to be an important learning experience; it greatly boosted their can-do attitude. They were determined to move ahead into yet another aeronautically related business venture.



1939: Joe holding the Tiger Shark, the first gas-powered Control Line model airplane marketed as a kit.

It was challenging for Victor and Joe to forge ahead during the Depression. As hard times continued, and the winds of World War II in Europe and the Far East gained momentum, the brothers launched a new and unique business. They began designing engine-powered model aircraft, which continued throughout the 1940s and 1950s.

The brothers formed a unique partnership that continued for sixty years. Victor and Joe were equally responsible



for the company's success in the design and manufacture of aircraft-related products. Victor was the ideas-man and Joe became a highly skilled craftsman-machinist and manager. Their combined knowledge and artisanship enabled the company to contribute not only many unique ideas, but also high quality products and marketing success. Victor was a man of many talents and abilities. He designed model airplanes with precision and attention to detail. Joe was a builder-flyer and possessed unique mechanical capabilities, even without a post-high school formal education.

Together, they produced the *Tiger Shark*, their first Control Line gas-powered commercial kit. The kit was advertised in the December 1939 issue of *Model Airplane News*, under the trade name *G-Line Flying*. The *Tiger Shark* established their distinction as producing the first commercial Control Line engine-powered model aircraft kit.

An application to patent controls for miniature airplanes, covering the new method of flying a powered model airplane by a control line, was filed November 6, 1939 and issued March 25, 1941.

The *Tiger Shark* model was flown with a single control line ("Guide Line"), approximately 50 feet long. The airplane was controlled by attaching one end of the control line to the tip of an outrigger, fixed forward of the leading edge of the wing, and attaching the other end to the tip of a control pole. By moving the tip of the control pole up and down, applying pressure about the

center of gravity, the airplane could nose up and down, climbing and diving in flight. The pole method developed into a bit of humor as readers commented that the brothers could not catch any fish, therefore used their fishing poles to fly model airplanes.

During the 17 years following the amusement ride-era, the brothers designed and constructed 18 unique engine powered aircraft models for Control Line and Free Flight. The design changes in each ensuing model incorporated feature advancements for yet more Control Line systems designed and manufactured by Victor Stanzel and Company.

Four unique Control Line systems to control models in flight were invented and manufactured by Victor and Joe. The first method of controlling an engine powered model airplane was G-Line single line control, installed in the *Tiger Shark*. The 1939 *Tiger Shark* was the first of 18 models designed by Victor, and the first single Control Line model kit ever made available for the model builder. Advertisements for the *Tiger Shark*, *Baby Shark*, and *Texas Ranger* G-Line Control kits came out in the 1941 and 1942 issues of *Toys and Novelties* magazine.



1940: A Texas Ranger, a combination Free Flight and G-line model kit with a 45-inch wingspan.



1943: The big Tiger Shark target airplane is "cranked up" by Victor. Designed for military gunnery practice, it was test-flown from the mounting on a 1942 Chevrolet.

First Phase: G-Line Flying Airplanes

Six unique models were designed for G-Line single line control:

<u>D</u> ate	Airplane	Engine	Wingspan
December 1939	Texas Shark	В&С	36"
March 1940	Texas Ranger	A & B	45"
November 1940	Baby Shark	A & B	24"
March 1941	Shark P-60	A & B	24"
March 1941	Shark P-60	С	36"
March 1941	Shark P-60	Rubber	24"

Two Free Flight models were designed and manufactured as kits:

Date	Airplane	Engine	Wingspan
March 1940	Texas Ranger	A & B	45"
July 1941	Interceptor	A & B	54"

Experimental Target Airplane

The *Big Tiger Shark* target airplane was designed and built in 1943. At the time, Victor and Joe were employed by Kelly Field Civil Service. The airplane measured five feet between wing tips, and was five feet long. It was large so it could fly in a large circle and carry controls to make the airplane, which was carrying a Herkimer OK twin-powered engine, climb, and dive. The steel-tube pylon, used to hold the airplane, was mounted on an automobile; Army Air Force gunners shot at the live, unmanned, moving target as training.

Second Phase: Roller Control Airplanes

The second phase of engine powered Control Line was a two-line control system, named "Roller Control." It was the brothers' first two-line control invention, and was manufactured and marketed by Victor Stanzel & Company. The control system consisted of a handle with two lines attached to a bell crank assembly. The lines moved a pushrod to activate the elevators, allowing the airplane to ascend and descend in-flight.

Date	Airplane	Engine	Wingspan
December 1941	Super–G Shark	B & C	24"
December 1943	Super-V Shark	B & C	24"
January 1945	Baby-V Shark	A & B	20"

Third Phase: Control-It and Thum-It Airplanes

The third, post-World War II phase of airplanes utilize two-line control systems, which the

Stanzels called "Control-It," and used a control handle, or "Thum-It."

Date	Airplane	Engine	Wingspan
May 1947	Shark G-5	С	30"
July 1947	Sharkadet	С	30"

Monoline Control Flying

Jim Walker patented the widely accepted two-line "U-Control" system about six months after Victor came out with his 1939 "G-Line" single-line control system. Both Stanzel and Walker systems had faults: they could cause a serious lack of control problem during flight. If the lines became slack because of windy conditions, there was no control given to the bell crank and elevators. In 1948, Victor and Joe began developing a unique control system called monoline, or single line control.

Monoline flying revolutionized Control Line Speed flying in 1950. It was an entirely new era of Precision Acrobatic Stunt and Combat flying, utilizing the medium of the Stunt-Master control units. The new system of Control Line flying was perfected through more than 12 years of experimental research and development. The brothers tried many different devices or mechanisms to solve the problem of loss of elevator control due to slackened lines.

The principle involved the transmission of torque through a solid steel control line to activate a control unit (cam) on the model, which in turn moved a push rod back and forth to the elevator horn. A special control handle applied the torque to the control line and a sliding control knob actuated it, which is moved "back" for "up" and "forward" for "down" in a manner similar to real aircraft controls.

Specific Monoline control units were designed and adapted for model aircraft to achieve different flying objectives. The 1/2A and ABC engine-powered Monoline control units were adapted for Sport and Trainer models. The Speed-Master control unit was adapted for Class

1/2A, A, B, C and jet aircraft. The Stunt-Master control unit was adapted for Aerobatic, Combat, Scale and Sport models in the 1/2A, A, B, and C classes.

Each Monoline control unit was a forerunner of improved Monoline control systems. In June of 1950, they designed the *Tuffy* airplane, the first of five Monoline kits marketed by Victor Stanzel & Company.

Victor and Joe introduced Monoline control flying to the modeling world at the Chicago Hobby Model Trade Show in 1950. They submitted a patent application on March 9, 1945 and were issued patent on "Single Line Control for Miniature"

1950: Tuffy, the first of five Monoline control kits designed by Victor and Joe.

Aircraft" on June 26, 1951. (All the Monoline airplanes, control units, handles, and lines manufactured by Victor Stanzel & Company are displayed in the Stanzel Model Aircraft Museum in Schulenburg, Texas.)

Monoline Control Airplanes

Date	Airplane	Engine	Wingspan
		Herkimer .074 or	
June 1950	Tuffy	.099	24"
August 1954	ABC Trainer	.19 to .35	36"
August 1954	1/2A Trainer	1 - 2A	18"
August 1954	Lil' Raider	1 - 2A	24"
May 1955	Sky Raider	A-B-C	40"
1954	Lil' Rocket (Ready-to-Fly)	0.049	15"

Monoline Speed Airplanes

The Stanzels began designing Speed models for their Monoline control systems in 1950. In 1951, they demonstrated their Speed model, *Tuffy*, on the parade grounds at Fort Sam Houston in San Antonio. It was there they met Dale Kirn, a member of the U.S. Air Force and an avid model builder and flyer.

On subsequent visits to San Antonio, Monoline Speed airplanes were flown to the delight of modelers there. As Dale indicated, "Victor flew the Speed airplane with a McCoy .29 at speeds that were the best he ever saw." Dale became a happy recipient of Monoline control unit and handle. The *8443*, an .049 engine-powered Monoline Speed airplane flown by Dale, set an official AMA Speed record of 100.89 mph. It was flown on a .010 diameter, 35-foot steel line.

At a 1954 Dallas contest, Dale set Speed records with his Class A Speed airplane equipped with the Stanzel's Monoline control system. He set the first two AMA Speed records, 134.68 mph and 154.98 mph.

The brothers organized a Monoline promotional tour in March 1955. They hired Dale and Bill Murry to travel across the U.S., demonstrating Monoline flying at model airplane contests, hobby shops, and model airplane clubs. Dale demonstrated the unique features of Monoline and Bill did the marketing.



1957: Open Champion trophy, Monoline Control Line event, East Dallas Exchange Club Southwest Model Airplane Championships, won by Clem-Beasley-Kirn.

Era of Ready-to-Fly Airplanes

The brothers' engine-powered Control Line model aircraft phase ended in 1957. They contemplated a significant change in their product line, as they perceived a curtailment of public interest for Control Line flying, both two-line and Monoline control. They observed that engine-powered model aircraft flying presented a noise problem; they wanted to reduce or eliminate that problem.



Dedicated employees assembled flying toys for more than forty years.



1958-1996: Assorted Ready-to-Fly toys designed and manufactured by Victor and Joe.

Victor and Joe envisioned that times were changing and less attention would be given to "build your own" kits so prevalent in the 1940s. The time was right to build and assemble airplanes in the factory, place them in an attractive box and market the product as a "Ready-to-Fly" toy.

They began to design Ready-to-Flies by incorporating an electric motor and dry cell batteries as the new power source. Focus was on developing the toys for children ages six and above.

They designed and produced a new series of toy airplanes. The airplanes were attached at the end of a cable, which transferred battery power to the model. The toy was approximately seven feet from the flight operator and flew in a circle overhead. A second and uniquely different flying toy was the *Free Flying Trigger Jet*. It was launched by a spring-loaded, trigger-released launch gun.

The brothers fueled their toy business for the next forty years with 33 different toy ideas and designs, all aeronautic in concept, and possessing the capability to fly fast. The primary objective was to produce a flying toy that was well-constructed, safe for children, had a low noise level, and contained features that made the toy lift and fly just like a real airplane.

A chronological list of toys that the brothers designed, manufactured, and marketed from 1958 to the end of the 20th century follows:

- *Electromic Flash* (1958) Conventional high-winged airplane; battery-powered, remote push-button controlled by a patented torque control system; tethered and flies above the operator.
- *Electromic Jet* (1959) Prop Jet flying model; battery-powered; remote push-button controlled; tethered and flies above the operator.
- *Electromic Scoot Air Car* (1960) Battery-powered; remote push-button directionally controlled; tethered and rides on a low-pressure cushion of air six to twelve inches above

surfaces.

- *Electromic Dart* (1960) Speedboat; battery-powered with "magic wand"; push-button controlled.
- *Sonic Jet* (1961) Tethered, adjustable-length Control Line flyer; flies by swing power; sounds like a real jet in flight.
- *Electromic Helicopter* (1962) Battery-powered; push button; remote controlled; tethered; takes off, hovers, lands and does rescue operations; comes with two astronaut figures.
- Aero-Jet Streak (1963) World's finest Ready-to-Fly, pure Free Flight jet, propelled by a Tru-Jet motor charged with ZOOM (a non-flammable propellant gas.)
- Tru-Jet Whiz (1964) Jet-propelled racecar, powered by a gas-pressurized Tru-Jet motor fueled by push-button control with ZOOM.



1986: Victor takes pride in demonstrating his original helicopter, invented in 1962.

- *Electromic Fury* (1965) Balloon "bursting" flying model stunt airplane; tethered; battery-powered; push-button controlled; flies into and bursts targeted balloons.
- *Electromic Wild Cat* (1966) Ferrari racecar; new "U-Drive"; freewheeling; Speed-line battery-powered control.
- *Electromic Lunar Bug* (1967) Flying moon craft and space game, battery-powered and push-button controlled.
- *Electromic Astro-Jack* (1968) Flying space boy and space station; battery-powered, remote push-button controlled; play a game of space, take off and land Astro Jack aboard the space station as he rolls and tumbles in space.



1969: The Flash-Copter Flying Combo, in original packaging.

- Electromic Flash-Copter Flying Combo (1969) -Interchangeable power pack control handles; powered with two D batteries; push-button remote controlled; comes with two astronaut figures for helicopter rescue operations.
- Electromic Astro Jack-Lunar Bug Space Combo (1969) - Came with flying space boy and flying moon craft; interchangeable power pack control handle; play a game of space with the weightless Astro Jack; fly the lunar bug to the moon; play moon landing space games.

- *Mini Jet Dart* (1970) Real jet-propelled airplane with tricycle landing gear; button-controlled; powered by ZOOM.
- *Mini Rocket Hawk* (1970) Ready-To-Fly rocket with launch stand; powered by ZOOM.
- *Mini Jet* "505" (1970) Jet propelled flying airliner; Ready-to-Fly; push-button control; propelled by ZOOM.
- *Dyna-Jet Whiz* (1971)
- *Trigger Jet Plane* (1972) Free Flight airplane with trigger release, spring-powered launch gun.
- *Swinger* (1972) Free Flight Stunt airplane with rubber band catapult launcher; swingpowered swing line; catapult free-line stunt flying.
- *Electromic Lil' Rascal* (1973) Stunt master biplane with new push-button stunt master control handle and secondary control knob.
- Re-introduced the *Scoot* (1975)
- *Trigger Jet Plane* (1976) Free Flight model airplane with spring powered launch gun and trigger release, Yankee Doodle Dandy depicting the *Spirit of 1776*.
- Repackaged the *Bug* to the *Star Bug*; new packaging on the *Helicopter*, *Lil' Rasca*l and *Electromic Jet*.(1978)
- *Electromic Gyro* (1979) Real flying model gyroplane (historic forerunner of the helicopter), battery-powered, push-button controlled.
- Shooting Star (1980) Free Flight space ship with trigger-release; spring-powered launch gun.
- *Electromic Star Raider* (1980) Flying space fighter model airplane; enemy satellite blaster; battery-powered; push-button remote control.
- *Space Shuttle* (1981) Free Flight rubber band catapult launched, in a blister package.
- Electro-Jet F-2000 (1985) Jet propelled fighter model airplane; remote-powered; turbo-jet propelled airplane; real jet sound.
- *Trigger Jet Stealth* (1987) Free Flight fighter model airplane with trigger-release, spring-powered launch



1958-1996: Assorted Readyto-Fly toys, designed, and manufactured by Victor and Joe.

gun.

- *Electromic Stealth* (1987) Strategic fighter model airplane; canard design; battery-powered push-button; remote-controlled.
- *Electromic Ziroids* (1987) Rotary model flying space toy with pilot; "Just in from Space"; vertical take-off; battery-powered push-button control launcher.
- Shooting Star (1991) Free Flight model airplane; four hot color assortments; rubber band launcher.
- *Space Shuttle* (1994) Free Flight model of a real space shuttle; white with official NASA logo; trigger-released spring-powered launch gun.

Marketing the Product

Marketing skills and techniques usually require professional training, but the Stanzels used natural abilities to develop their marketing strategy. They possessed a unique ability to design, manufacture, and market a variety of products directed to different consumer bases. They were involved in every step of the advertising process.

During the 70-year history of the Victor Stanzel Company, Victor and Joe made major product changes in the types of products they manufactured. Each modification in products changed their consumer base. In the 1930s, the company directed manufacturing toward two objectives: (1) building true-scale ornamental models, and (2) manufacturing commercial rides for amusement parks.

In the 1940s and 1950s, the company manufactured and sold gas-powered model airplanes and control systems to modelers. In 1958, the last major change took place with the advent of Ready-to-Fly toys. The end use customers quickly changed to 6- to-15-year-old boys and girls, in contrast to the mature older model builders in the 1940s and 1950s. Consequently, the Stanzels had to focus on their marketing strategies.

The earliest marketing effort by Victor was in 1929, when he displayed his true-scale ornamental models in the window of a blueprint shop in downtown San Antonio. He expanded marketing by advertising in July 1932 issues of *Popular Aviation*_and *Aero Digest*. In November of 1932, he introduced the *Gee-Bee Super Sportster* as a finished model for \$18.00, including baseboard. Advertisements continued to run for both finished models and construction kits until May of 1938.

The first ad in 1932, shown here, did not include prices but asked customers to write for a descriptive folder. Later ads offered kits for \$1.80 and finished models for \$20.00 plus postage. Payment made with postage stamps was common in the 1930s. Now Victor and Joe had a clear understanding of effective advertising and were involved in every step of the design process. They proved their diverse abilities by developing advertising layouts for all products.

They created the original copy of images and words they wanted to print, mounting them on a

wooden block. Multiple blocks were used to print more than one color. Printing plates were used to print poster, letterheads, and layouts.

The brothers established their original advertising headliner, "G' Line Flying," in 1939. It became a standard trademark, displayed on all advertisements, posters, letterheads, and magazine ads for nearly two decades.

To help retail stores sell their products, they provided toy displays. They photographed their products and used them for advertising, packaging design and promotion. They learned it was vital to use optimal color combination for ads in order to maximize sales. Their favorite colors consisted of red-blue-white-yellow and red-yellow-black and white.

Early Products

At the right is an advertisement of the Stanzel's earliest line: New True Scale Ornamental Models, published in the December 1938 issue of Model Airplane News.

First Commercial Control Line Model Airplane: In the latter part of 1939, the first commercial kit for a Control Line model airplane, the Tiger Shark, was advertised in the December 1939 issue of Model Airplane News under the trade name "G" Line Flying. An application for patent number 2,236,348, "Controls for Miniature Airplanes," covering the then new method of flying a powered model airplane via a control line, was filed at the U.S. Patent Office on November 6, 1939.



Model Airplane News, December 1938

The principal of the controls for the miniature airplane patent consisted of a control line attached to the structure of the airplane at a point forward of the center of gravity. The other end of the control line was attached to the tip of a control pole.

The first *Tiger Shark* models were flown on control lines approximately 50 feet in length. The point of attachment of the control line to the airplane was at the tip of an outrigger fixed forward of the leading edge of the wing. By moving the tip of the control pole up and down, and thus applying up and down pressure about the center of gravity, the plane could nose up and down and thus climb and dive in flight.

Advertising, Part 1: An important part of selling a product is placing it into a designated market to reach buyers. This involves a variety of skills and talents that are unrelated to manufacturing or design. As proof of the brothers' diverse abilities, they managed the marketing for all of their products. In the early advertisement to the right, Victor used a field photograph of a Tiger Shark and added his artistic expertise to promote "G" Line, or G-Line, Flying.



Tiger Shark ad



Texas Ranger model

Texas Ranger: This was the only combined Free Flight/G-Line model kit ever produced by Victor Stanzel. This airplane, made from full-size plans, was constructed out of the same type of material as was used for the *Tiger Shark*. The entire airplane was covered with silkspan and silk. The finish was both clear and colored nitrate dope.

Power was supplied with an Ohlsson .19 engine, and the front section of the airplane (with ignition tray) could be removed from the fuselage for inspection and maintenance.



c. late-1930s: Victor Stanzel & Company catalog

Advertising, Part 2: The brothers established their original advertising headliner, G-Line, in 1939. It became a standard trademark displayed on all advertisements, posters, letterheads, and magazine ads



for nearly two decades. Consistent advertising in aircraft modeler magazines was a factor that established the company's reputation as a dedicated manufacturer of quality, innovative products.

Below is the front page of a four-page sales catalogue designed by Victor in 1947. The inside pages show photographs of various G-Line model aircraft with descriptions and prices for each complete kit.



1947: Victor Stanzel & Company catalog



\$1000 prize giveaway advertisement.

Monoline/Mono-Line: Monoline flying was the Stanzels new invention in 1950. It solved an operational flaw in two-line control systems, which resulted in inevitable crashes, particularly on windy days when lines became slack during flight.

Victor and Joe believed that Monoline was a giant improvement in Control Line flying. The hobby world remembers Victor as "Mr. Monoline." To add even more interest to the Stanzel's new Monoline system, a \$1,000 prize was offered to the winner of the new Monoline Speed flying category at the National Championships (Nats).

A Monoline promotional tour demonstrated the flying capability of the single-line elevator-

control system. Meetings were held in many locations across the country, from 1955 to 1958, with tour stops for two years. Posters were printed to aid in the promotion of Monoline flying demonstrations. These colorful posters were placed in hobby stores and handed to modelers.

The Skyraider: This stunt plane was for Class A, B, and C engines. It had a 40-inch wingspan and was powered with a K&B .29 engine. It was flown on a 70- to 150-foot line.



Skyraider model

Proportional Engine Speed Control: This was another Monoline application that offered the flyer

a positive way for controlling engine speed (as well as elevators) during flight. The 2-line flyers had to use *3 lines* to accomplish this feat, but still had the fatal problem of having no elevator or engine speed control when the lines went slack. Not so when Monoline units were used. Both control units operated with slack lines!





Proportional Engine Speed Control model

The yellow airplane in the photo (above, right) has two 1/2A Stunt-Master control units attached to the fuselage. The top unit controlled the engine speed (with an exhaust restrictor) and the other unit actuated the elevators. A special "handle" was used that has two Monoline handles attached to a mounting base that slips over the flier's belt.

Super G Shark: This was the first two-line kit that Stanzel released. The biggest feature of this

new patented control system was full elevator control during flight. A small plywood "disc" had two linen lines that connected it to a double elevator horn. When the other two lines (coming off the disc) were pulled back and forth, the elevators would go up and down. The lead-out guide (from the fuselage) was a steel rod with a fishing line guide attached to the end. Another unique feature shown on the plans was an interesting control handle. It was called a Directional Control Pole. With this handle, the flyer had a broader range of sensitivity during the controlling action in



Super G Shark

fight.

The model in the photograph to the right had the control system mounted outside the fuselage; the kit version had the controls located inside. It flew with an Ohlsson .60 ignition engine.



Handwritten toy names brainstormed by Victor.



A Tiger Shark kit, amusement park ride model, and scale models on exhibit in the museum.

Ready-To-Fly Toys

In 1957, the Victor Stanzel Company terminated a successful era of producing scaled ornamental models and gas powered model aircraft kits with associated Control Line systems.



(above and right) Artwork on packaging designed by Victor and Joe in the Ready-To-Fly era (1958-2001)



Victor and Joe recognized a new demand for Ready-to-Fly products, in contrast to previous do-it-yourself model demands. They responded to these changing market forces by creating a series of Ready-to-Fly, battery-powered, remote-controlled toy airplanes for young people ages six and up.

The new products changed the manufacturing and marketing process. It required plastic molding machines, new mold designs, and employees to hand-assemble the products.

In the years that followed, they designed, manufactured and marketed thirty-three Ready-to-Fly model airplanes and related toys for "children of all ages," older than 6



(left) 1958: Electromic Flash 500, first of 33 Ready-To-Fly, battery-powered toy airplanes designed by the Stanzels. It launched the company into 40 years of successful toy manufacturing and marketing.

years. Easy to fly, these high quality products were sold in discount stores, drug and grocery chains, specialty toy stores, and some stores overseas. The brothers were an indispensable team. They always took complete charge of the process, from designing their products to marketing them.

The first Ready-to-Fly toy was the *Flash 500*, a conventional propeller driven airplane introduced to toy buyers at the 1958 International Toy Fair in New York City. There was an immediate demand for the *Flash 500*, and it continued to be a best seller for nearly 40 years.

The Stanzel Family Foundation, Inc – History and Purpose



Two views of the Stanzel Family Foundation building. (Ancestry residence on the far left.)

The Stanzel Family Foundation, Inc. was established in 1989 by Joseph and Victor Stanzel for the purpose of providing charitable and educational opportunities as a means of showing support and gratitude to the community, its people, and model airplane enthusiasts everywhere.

The Foundation is a not-for-profit corporation operating under the provisions of the Internal Revenue Service's Section 501(c)(3). The main objectives under the charter, established by the Stanzel brothers, include the following:

1) Education: Provides scholarships for qualified graduating seniors who reside in Schulenburg and Weimar school districts. Special scholarships may be granted to professional career individuals in health care and education who desire enhancing skills to obtain an advanced

degree or certification.

2) Medical: Provide financial assistance for health-related programs to enhance health conditions of citizens in the Schulenburg and Weimar communities. In 2002, the Foundation approved the Schulenburg Weimar Area Parents as Teachers program. The Foundational also provides operating funds for the Boys & Girls Club of Champion Valley, and Schulenburg Weimar In Focus Together (SWIFT), a community organized non-profit.

The Foundation building was constructed in 1997, adjacent to the Ancestral home, on land first purchased by Stanzel ancestors in 1870. It is located at 311 Baumgartner Street along Highway 77 in Schulenburg, Texas.

The 4400 square-foot building provides office space to administer affairs of the Foundation. More than one-half of the space, 2600 square-feet, is the Stanzel Model Aircraft Museum, which exhibits displays about Joseph and Victor Stanzel's contributions to develop the history of model aircraft.

The Stanzel Model Aircraft Museum

Victor and Joe were planning to establish a model aircraft museum as early as 1986. They enlisted the service of an architect to develop drawings of a building that would be constructed



The Stanzel Model Aircraft Museum, established in 1999. The Museum is within the Foundation's building. The ancestry residence building is on the far right.

on the site of the Victor Stanzel Company. The design work made progress; however, the architect met an untimely and sudden death and the project was abandoned.

As their model aircraft business progressed, they were making new plans for a museum. It would be a tribute to the community of Schulenburg and an expression of appreciation to the hundreds of dedicated employers who contributed to their success.

The museum they envisioned would make possible for them to exhibit their model aircraft legacy, which they created over their many years of hard work and entrepreneurship.

Being an artist and designer during his manufacturing career, Victor began drawing his version of a foundation building with museum in 1995. The architectural firm of Cutright and Allen developed final plans for the Foundation building in 1997. It consisted of 2600 square feet of space for the museum and 1800 square feet allotted for office space to conduct Foundation affairs. The present museum



Dale Kirn (left) and Ted Stanzel in front of the Tiger Shark display in the Museum.

contains displays and interactive exhibits about Joseph and Victor's contributions to model aircraft designing and manufacturing, which began in the 1920s and ended in 1997.



Static Museum display of Victor (left) and Joe Stanzel flying airplane toys for children.

The displays consist of solid scale models of WWI designs, amusement rides of the 1930s, gas-powered Control Line and free-flying model aircraft, and ready-to-fly toys for children. A total of 25 patents were awarded to Victor Stanzel during his model aviation career.

The Stanzel Model Aircraft Museum is open to visitors and available for special tours on Mondays, Wednesdays, Fridays, and Saturdays, from 10:30 am to 4:30 pm.

For more information, call the Foundation at (979) 743-6559, fax (979) 743-2525, or email museum@stanzelmuseum.org. The website is www.stanzelmuseum.org.

Ancestral Residence



Stanzel ancestral home

Franz and Rosina (Guenther Blaschke) Stanzel built this residence as their first home in American in 1870, soon after immigrating from the Austro-Hungarian Empire. They purchased 100 acres of farmland in 1870, deeding a small portion to a railroad company that was advancing westward. They also gift deeded land for construction of the Saint Rose of Lima Catholic Church and Parochial School.

In addition to farming the land, Franz earned income cutting cedar posts for landowners to build fences.

The grandparents of Victor and Joe built this 19th century family residence that consisted of a bedroom, living room, dining room area, and kitchen with an attached room. This so-called pantry was used to store preserved foods such as cured ham and bacon, canned vegetables, and fruits. They called this room their "speck schrank," or bacon closet.

The house was restored to the original construction and turned into a residence museum. It is fully furnished with period appropriate pieces; antique wood-burning kitchen stove, heater, bed, and wood cabinets dating from the late 19th-early 20th centuries. The perimeter of the home is bound by a white ornate picket fence. A large open porch extends from the front entrance of the home. The resident museum has become a part of the Stanzel Family Foundation's Stanzel Model Aircraft Museum campus.

The Stanzel Brothers Factory Museum

The third museum developed on site of the Stanzel Family Foundation grounds was the Stanzel Brothers Factory Museum, established in 2005. The original Victor Stanzel Company manufacturing building was constructed in 1935; ten years after Victor began the airplane hobby business in the family residence.

This wood-framed 60- x 30-foot sized structure was built to manufacture full-scale amusement rides, consisting of the Fly-



Mannequin display of Victor and Joe working together on a new design.

A-Plane, 20th Century Stratus Ship, "G" Ride, and amusement games. The Stanzel brothers began design and development of gaspowered Control Line model

airplane kits in this building in the late 1930s.



Tour in front of the Stanzel **Brothers Factory Museum**

The original ten-by-ten-foot size office depicts designs of the 1930s. It is furnished with the original drafting table used to design all of their products. Life-sized mannequins of Victor and Joe show them seated at the table. The office is furnished with the original wood desk, chairs,

and display cabinets of simple home construction, designed, and built by Joe and Victor.

On display in the museum are original woodcutting saws, router, sanders, and planer used in constructing balsawood parts for Control Line kits during the 1930s and into the 1950s.

A large injection model machine and vacuum-forming machine for plastic manufacturing are on display.

The process for manufacturing airplane wings is a unique display in the museum. The design and color combination of display packaging of their products is also demonstrated.



Injection molding machine from 1946, probably the first such machine in Texas.



Magazine issues from the late 1930s, on display on the original wood desk.



Woodcutting saws used in the 1940s to manufacture balsawood Control Line kits

Timeline

[Revised November 1, 2006, new entries added February 28, 2005]

1926

 Victor, 15 years of age, successfully completes correspondence courses in drafting, mechanical drawing, algebra, physics, and practical mathematics through the American School in Chicago, Illinois.

1927

 Victor successfully completes correspondence courses in tool making, machine shop work, strength of materials, and machine shop management.

1929

Victor begins carving true-scale ornamental model airplanes in the family residence.

1932

• Victor begins advertising the Curtis *Hawk P-6-E* and Curtis *Falcon AC-3*, true-scale ornamental models in model aviation magazines.

1933

• Stanzel-Barborak and Company design and build their first full-sized amusement ride, the "Fly-A-Plane." The U.S. Patent Office issues Victor his first patent for this ride.

1935

- The brothers build their first 1800 square-foot factory in Schulenburg, Texas. (This building is where the Stanzel Factory Museum is currently located.)
- Stanzel-Barborak and Company builds the "20th Century Stratos-Ship" amusement ride.

1936

• The "20th Century Stratos-Ship" is placed on exhibit at the 1936 Texas Centennial Exposition in Dallas.

1937

 Victor receives his second patent in December of 1937 for the "20th Century Stratos-Ship."

1938

- A U.S. Patent is issued in January for Victor's invention of the "Lamp and Smoke Stand."
- The brothers invent a game-playing machine that uses magnetic balls. The U.S. Patent issued in March of 1941.
- The brothers' third amusement ride, named the 'G' Ride, is manufactured in Schulenburg, Texas. A U.S. Patent is issued in 1941.

1939

• The brothers design and build the *Tiger Shark*, their first gas-powered "G" Line flying

model aircraft. It is believed to be the first Control Line aircraft kit manufactured and sold in the world.

1940

• The Free Flight, gas-powered *Texas Ranger* is the second kit offered. The *Baby Shark*, a single-line "G" Line flyer, follows in November.

1941

- The gas-powered *Shark P-60* is designed as three different powered models for single-line "G" Line control: 1) models with Class A and B engines, 2) models with Class C engines and 3) rubber-powered models. The Free Flight *Interceptor*, designed and produced for kit builders, comes out in July.
- The gas-powered *Super G Shark* is the first Stanzel two-line control model aircraft. It is designed for the Roller Control system, invented by the Stanzels.

1942 - 1943

 Victor and Joe are employed by the U.S. Government Civil Service Department's Drafting Division at Duncan Field in San Antonio, Texas.

1943

- The gas-powered *Super V Shark* is designed by Victor with two-line elevator control for his improved Roller Control system.
- The brothers design and construct a "target airplane," which they propose to the U.S. Army Air Force for gunnery practice. It has a five-foot wingspan and six-foot long fuselage.

1945

 Victor designs the gas-powered Baby V Shark with two-line elevator control for his improved Roller Control system.

1946

- Victor Stanzel & Company designs and constructs a 6800 square-foot factory building and installs a new HPM Injection-Molding machine. The machine molds plastic control handles and model-aircraft canopies for gas-powered kits. It is the first known molding machine of this kind in Texas.
- Bee-Line Jets, ultra-modern super fast CO2 propelled racing models, are introduced.

1949

• The Stanzels invent Monoline, a single-line, elevator-controlled system for flying model aircraft. The operator maintains control of the airplane even when the flying line becomes slack.

1950

• *Tuffy* is their first model aircraft designed for Monoline flying.

1954

■ The *Lil' Rocket*, a Ready-to-Fly, gas-powered, single-line, elevator-controlled model aircraft, is introduced. More Monoline model aircraft kits are introduced: the *ABC Trainer*, the *I/2A Trainer*, the *Lil' Raider* and the *Sky Raider*.

1955

 Dale Kirn, master Monoline flyer, and Bill Murray, marketing strategist, start a crosscountry promotional tour demonstrating the sensational new Stanzel Monoline. The tour lasts three years.

1956

 Victor Stanzel & Company designs and constructs a 15,700 square-foot building in Schulenburg, Texas. The added workspace is needed to accommodate the expansion for Ready-to-Fly model manufacturing.

1958

- The U.S. established the National Aeronautics and Space Administration (NASA) in 1958 to bolster developments in science and technology.
- The brothers incorporate their business and/change their name from "Victor Stanzel & Company" to the "Victor Stanzel Company."
- The Victor Stanzel Company designs the *Super Flash 500*, their first Ready-to-Fly, remote-controlled, battery-powered toy airplane.

1960

• The Stanzel-designed *Electromic Scoot Air Car* is added as a Ready-to-Fly toy.

1961

• The *Sonic Jet Control Line Flyer*, with swing-powered control handle and terrific jet sound effect, is introduced.

1962

• The *Electromic Copter* is designed and added to the line of Ready-to-Fly toys.

1963

■ The Stanzels introduce the *Aero-Jet Streak*, world's first Ready-to-Fly, Free Flight model, powered with "ZOOM," super-jet pressurized gas.

1964

- The *Tru-Jet Streak*, a Ready-to-Fly, ZOOM-powered Free Flight model, is added.
- The *Tru-Jet Whiz*, a jet-propelled racecar, is powered with ZOOM.

1965

• The *Electromic Fury* is introduced as a battery-powered, "balloon busting" aerobatic sports airplane.

1966

• The *Electromic Ferrari Wildcat Grand-Prix*, a battery-powered, freewheeling racecar, is

introduced.

1967

• The Lunar Bug Flying Moon Craft and Space Game, with manned space capsule, is added as a Ready-to-Fly toy.

1968

• The *Electromic Astro Jack Flying Space Boy and Space Station* is designed. The space boy rolls and tumbles as he walks in space.

1970

• Three new jet-propelled, Ready-to-Fly toys are introduced: (1) the *Mini-Jet Dart* airplane, 2) the *Mini-Jet "505"* airliner, and 3) the *Mini-Rocket Hawk* propelled by ZOOM.

1971

■ The *Dyna-Jet Whiz*, a Free Flight, catapult-powered flyer with hand launcher, is introduced.

1972

- Two new Free Flight, Ready-to-Fly toys are introduced: 1) the *Trigger Jet Thunderbird* airplane, powered with trigger-released, spring-powered launch gun, and 2) the *Swinger Stunt Plane*, catapult-powered aircraft with swing line.
- The company's employment level peaks with 125 employees in the early 1970s. It is a time when boys and girls are very excited about flying toy airplanes.

1973

• The brothers introduce the *Electromic Lil' Rascal*, a battery-powered, remote-controlled, stunt-master biplane; an aerobatic flying sensation.

1975

• The brothers re-introduce the *Scoot Air Car* with new color variations.

1976

• The Brothers introduce the new *Trigger Jet Thunderbird*, a Free Flight airplane to commemorate the *Spirit of 1776*, with a Yankee Doodle Dandy wing design.

1978

• The name *Lunar Bug* is changed to *Star Bug*. New package designs are made for the *Copter*, *Lil' Rascal* and *Electromic Jet*.

1979

• The *Electromic Gyro*, a Ready-to-Fly, battery-powered gyroplane, is introduced in August. The window display box is redesigned for *Flash 500* and *Thunderbird*.

1980

• The brothers introduce the *Shooting Star*, a Free Flight spaceship with trigger-release launch gun, and the *Space-Kraft Star Raider*, a flying space fighter with enemy satellite blaster.

1981

• The *Space Shuttle*, a Free Flight, rubber catapult-launched airplane, is introduced in a clear plastic bubble pack.

1985

• The *Electro-Jet Tiger*, a Ready-to-Fly, battery-powered, turbo charged and jet propelled with true jet sound, is introduced.

1986

Joe and Victor are inducted into the Model Aviation Hall of Fame.

1987

- The Stanzels introduce the *Electromic Stealth*, a strategic fighter with unique canard design and all-black finish.
- The new, all-black *Trigger Jet Stealth*, a Free Flight fighter airplane, is introduced. The airplane flies into the air by spring-powered launch gun.
- Also introduced are Ziroids, rotary-flying toys with battery-powered launchers and ziroid pilots "just in from space."

1989

 Victor and Joe establish the Stanzel Family Foundation, Incorporated to provide charitable and educational opportunities to the Schulenburg and Weimar communities.

1989

 Victor becomes President of the Board of Directors. Joe Stanzel and Thomas Latter are Directors of the Foundation.

1990

- Joe passes away in July at Methodist Hospital in Houston, Texas
- Theodore Stanzel, nephew to Victor and Joe, joins the company.

1991

• The company adds the *Shooting Star*, a newly designed, Ready-to-Fly, rubber-launched airplane.

1994

• The NASA Space Shuttle, all white with trigger-release and spring-action launch gun, is introduced

1997

- Victor passes away in April at his residence in Schulenburg.
- Theodore Stanzel becomes President of the Victor Stanzel Company. James Stanzel

becomes Vice President, and Robert Stanzel serves as Treasurer.

1998

• The Stanzel Family Foundation building is constructed. The Foundation establishes the Stanzel Model Aircraft Museum.

2001

■ The Victor Stanzel Company discontinues manufacturing Ready-to-Fly toys in September. Outsourcing and importing of foreign-made products by many U.S., toy merchandisers is a major factor in this discontinuation.

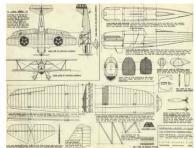
More Photographs



The Stanzels' first factory, a woodframed, 30- by 60-foot building, constructed in 1935.



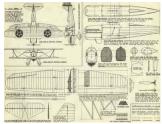
A Curtiss Falcon AC-3



Scaled down drawings, quarter-inch to one-inch ornamental models, produced by Victor Stanzel.



1937: A U.S. Army Boeing P-12-E biplane, designed and marketed as a kit.



Scaled down drawings, quarter-inch to one-inch ornamental models, produced by Victor Stanzel.



1940: Joe Stanzel analyzes the Baby Shark, a G-line flying airplane, in the factory's front office. Note the rocket desk lamp displayed at left.



Vic with a Baby Shark, sold as a kit in 1941. A Curtiss Hawk P-36 is in the upper left corner.



1940: The Interceptor kit, a Free Flight model airplane kit.



1939: The Tiger Shark, a G-line control kit.



1940: The Interceptor, fully built, with a 52-inch wingspan.



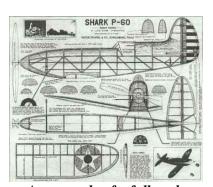
1939: The Tiger Shark, fully built. It was a gas-powered, single Control G-line model. Stanzel had a control-for-miniature-airplane patent.



1940: The Baby Shark, a singleline, G-line Speed ship with a 24-inch wingspan.



1941: The Shark P-60, a rubber-powered, G-line airplane with a 24-inch wingspan.



An example of a full-scale model aircraft drawing by Victor. The Stanzels designed 18 unique model aircraft, marketed in kit form, from 1939 to 1954.



1943: The Super V Shark, a gaspowered super G-line flyer with an improved roller control device and a 24-inch wingspan.



1941: The Shark P-60 Class C, a gas-powered G-line army-type pursuit airplane with a 36-inch wingspan.



Test flying the target airplane, which was attached to a line and secured to a rotating arm mounted on the top of the vehicle.



1947: The Sharkadet, a gaspowered G-liner designed for the new Control-It and Thum-it devices.



1941: The Super G Shark, a gaspowered, two-line control kit with full in-flight elevator control.



1947: The Shark G-5, a gaspowered G-liner designed for the new Control-It and Thum-it devices.



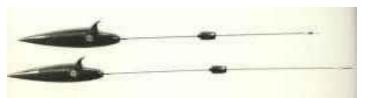
The Stanzel Model Aircraft Factory, constructed in 1946 in Schulenburg, Texas.



1947: Bee-Line Jets were marketed in kit form as the Flash Rocket and Super Sonic Streak, propelled along a steel line by a CO₂ gas cartridge.



1954: Another type of Monoline control device for Class A. B. and C Sneed models.



1945: Monoline control handles with sliding control knobs, which applied torque to the line.



1955: The Sky Raider, a Monoline stunt airplane for A, B, and C engines with a 70- to 150-inch line.



1954: The ABC Trainer, a Monoline airplane in a prefabricated kit. Class A, B and C controls could be used with lines up to 150-inch long.



Victor was a problemsolver, utilizing the trial and error method at his workbench.



1954: Monoline control devices for Class A, B, and C Speed models.



The Lil' Raider, another Monoline airplane.



(Left to Right: Paul Wagner, Joe Stanzel, and Victor Stanzel with the lawn mower.) Getting some exercise tidying up the factory grounds.



1956: Joe Stanzel produces a product on the metal lathe.



1952: Joe Stanzel produces a product on the duplicating engraving machine.



1954: The Lil' Rocket, a gaspowered single Control Line model, completely assembled, and Ready-To-Fly.



1958: The Stanzels (Victor, left) were overwhelmed with orders for their Electromic Flash, a battery-operated remote-controlled airplane toy.



Victor, about 85, relaxing in his twilight years, still planning yet another project.



1985: Victor and Joe with employees, enjoying Christmas festivities in the factory.



(Left to Right: Victor, employee Sophia Muehlstein, and Joe) Sightseeing at the Texas State Capitol in Austin, Texas.



c. 1987: Victor and Joe outside their factory in Schulenburg.



1986: Victor and Joe entertained by Santa Claus



1986: Victor and Joe inducted into the Model Aviation Hall of Fame at the Lake Charles Civic Center in Lake Charles, Louisiana.





1992: At age 83, Victor, a perfectionist, works to "get it right" at his workbench.



Victor flying the electric-powered single-line Control airplane, patented in 1997.



1986: Victor and Joe research an electric-powered airplane they believe will become the future in Control Line flying



1992: Assorted propeller-driven and ducted fan prototypes, and Control Line electric airplane models.



The Stanzel Family Foundation, established in 1989 by Joe and Victor Stanzel, provides charitable and educational opportunities as a means of showing support and gratitude to the community, its people, and model airplane enthusiasts everywhere. Inside this building is the Stanzel Model Aircraft Museum.



The Stanzel Model Aircraft
Museum, established in 1999,
features over 30 static displays.
They show the 70-years of work of
Victor and Joe. The two hobbyiststurned-entrepreneurs revolutionized
model airplane designs and Control
Line flying devices, and received 28
patents from the United States
Patent Office.



The Stanzel Brothers Factory Museum was established in 2005 to exhibit the manufacturing processes used by Victor and Joe over their 70year history.



October 2006: Boy Scout Troop 210 attending an Aviation Merit Badge class at the Stanzel Factory Museum.

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