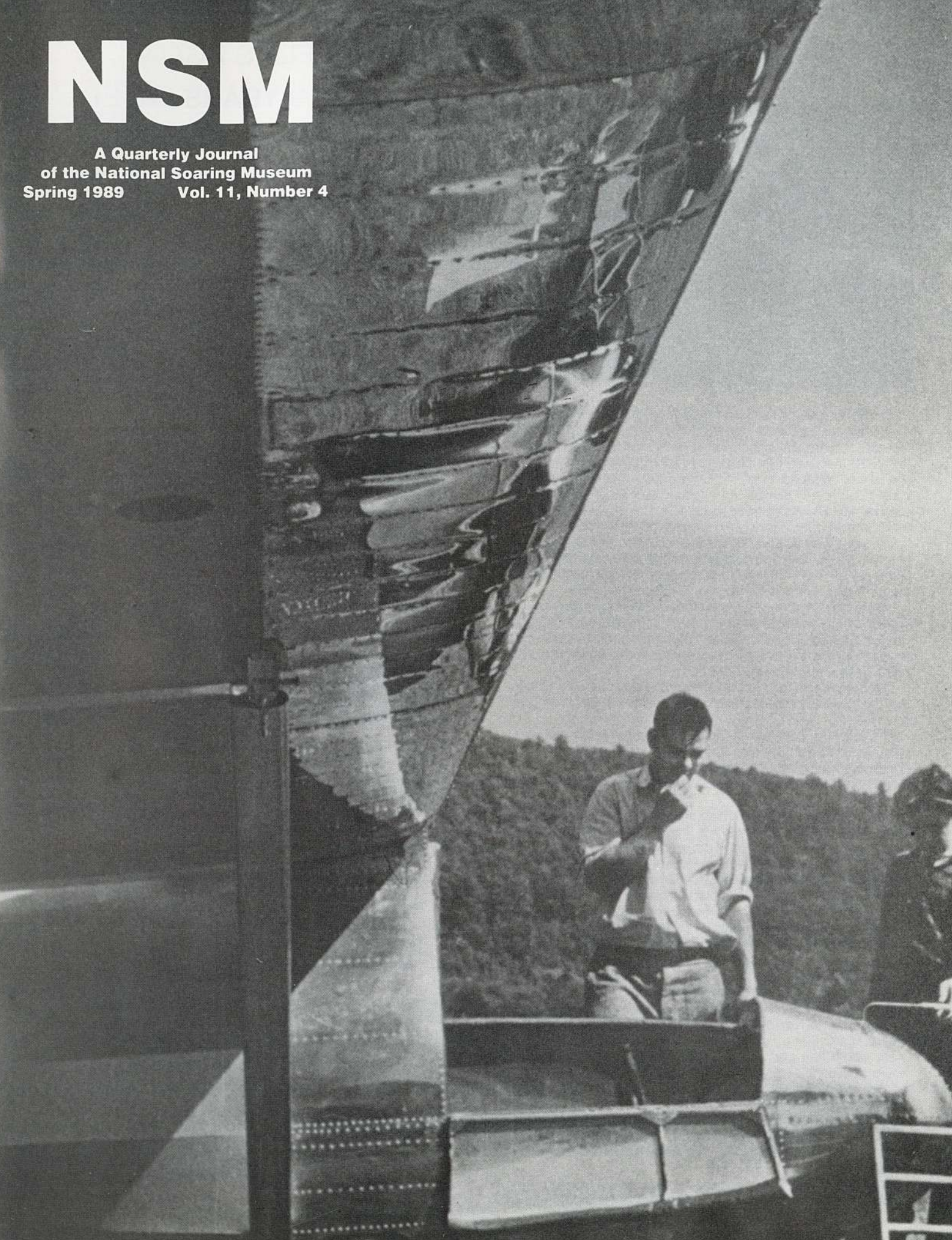


NSM

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THE FIRST SCHWEIZER GLIDER FLIES AGAIN

.....59 YEARS LATER TO CELEBRATE THE 50TH ANNIVERSARY OF THE SCHWEIZER AIRCRAFT CORPORATION



History repeated itself. on wings, May 20th, 1989, when Paul A. Schweizer skittered into a gusty 10-knot wind flying a reproduction of the first Schweizer glider, the SGP 1-1.

The 32-foot wings of the sturdy-looking little primary carried one of the co-founders of the Schweizer Aircraft Corporation, behind 500 feet of towline, up a respectable 30 or 40 feet to an easy release and about 25 seconds of nostalgia. "We had a lot of wind....It took off so easily," said its exhilarated pilot on landing.

The flight was a replay of the first Schweizer glider's maiden hop with Paul at the controls over Peekskill, NY, June 19th, 1930. It was part of the fiftieth anniversary celebration of the founding of the Schweizer Aircraft Corporation in December 1939.

Lindbergh's famous 1927 Long Island/Paris transatlantic flight first fired the Schweizer brothers' interest in aviation. The three, Ernie, Paul, and Bill, although too young to fly, did the next best thing when, along with some neighborhood kids, they started the Mercury Model Airplane Club.

The Schweizers read two aviation articles that convinced them that the time had come to give up modeling for the real thing, a full size glider.

The first was a New York Times story about a German glider pilot, Peter Hesselbach, who stayed aloft four hours over the sand dunes of Cape Cod. The other was the June 1929 National Geographic that carried an account of gliding in the Rhöen Mountains of Germany.

Ernie, although still only a high school senior, read a book on stress analysis and "Popular Mechanics" for construction and quality guides, then went boldly to work designing a glider.

Without their father's permission, the brothers started to gather materials for their glider project at the family's Peekskill, NY farm.

As Ernie, Paul, and Bill completed ribs and metal units, these components were hidden away because of the boys' concern for whether Papa Schweizer would let them fly their completed glider.

When they reached the point at which the assemblies were too obvious to hide, the father was approached. On seeing the quality of the workmanship and commitment of the builders, the senior Schweizer gave his permission to proceed.

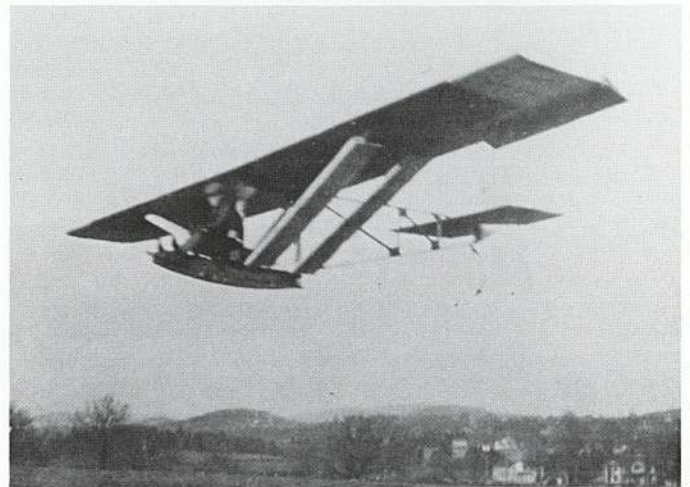
However, the brothers waited until their father was on a business trip to New York City before Paul introduced the little ship to flight.

He said it had cost them about \$100.00 and, "took a lot of hours." On June 19th, 1930 the first Schweizer glider was slung into the air from "the property of Enoch J. Tompkins," according to the Peekskill Evening Star, by a rubber shock cord, "manned" by neighborhood kids and members of the Mercury Model Airplane Club. Later a Model A Ford was used to pull the shock cord.

The appellation "SGP 1-1" translates to Schweizer Glider, Primary, one place, first design.

When Paul Schweizer landed at the Elmira-Corning Area Regional Airport last May, he grinned and said that he had just

Paul A. Schweizer prior to take off in the 1930 SGP1-1 reproduction at the Elmira/Corning Regional Airport May 20, 1989 — the commemorative flight was part of the Schweizer Aircraft Corp. 50th Anniversary celebration.



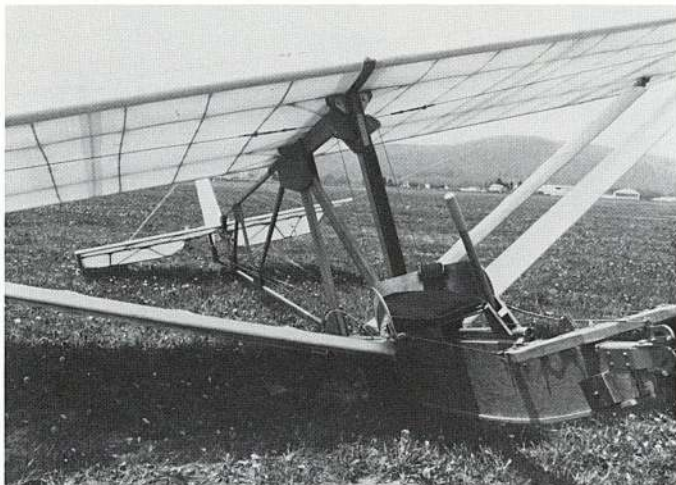
Paul A. Schweizer flies the SGP1-1 Schweizer primary glider at Peekskill, NY, in June 1930. (Note the wide Bellanca-type wing struts that were designed to add lift to the tiny ship.) The three brothers, Ernie, Paul, and Bill, built the SGP1-1 in their father's barn. A full scale reproduction of this glider is on loan from the Schweizer Aircraft Corp. and is part of the National Soaring Museum's 1989 exhibit.

relived the past. "It was that great sensation that got us started years ago . . . being able to fly without a motor. It was a lot of fun to fly the same type of plane that I flew 59 years ago. It was most impressive with just your two feet and that little beam sticking out in front of you; perfect visibility," he said.

When asked how the reproduction flight compared to the first one, Paul said, "In the beginning we had nothing to compare it with. Now, I've done so much flying that it doesn't have so much newness. The first flight lasted three or four seconds. We launched with a shock cord, so if you could get up and glide three or four hundred feet you were really doing something."

Before the flights, the "1-1" was subjected to one of the most thorough pre-flight inspections on record....not only by the Schweizers who would do the flying, but by Ernie, the designer of both the original and the reproduction. He twanged wires, thumped wing and strut mountings, cycled controls and minutely inspected every juncture and pin on the ship. He gave last minute advice on what to expect on the handling characteristics and watched as the ship was eased into its launching position 500 feet behind the pickup tow truck. When asked about the woods used

(continued on page 3)



The 1930 Schweizer SGP1-1 primary glider reproduction at the Elmira/Corning Regional Airport, May 20, 1989.

(continued from page 2)

in the original, Ernie chuckled, "We used a half dozen . . . the spars were Sitka spruce, the ribs and ailerons, white pine; the fuselage, Sitka spruce and birch, and the tail surface spruce. The fittings were fashioned from sheet steel and aluminum. The aluminum came from a door kick in our father's restaurant. Hard wire was used throughout, with cable positioned over pulleys. The covering was doped-light muslin."

The main difference between the original and the 1989 reproduction according to Ernie, was the substitution of Douglas fir for Sitka spruce in the spar. Ernie commented that while the fir is somewhat heavier than the spruce, it is stronger. Dual wheels were used for ground tow because of hard surface launches. Different glues than those used in the 1930 ship were also applied.

Paul recalled that the original rudder bar was made of cabinet plywood, and one evening it rained on the unprotected primary. In the morning the brothers found their rudder bar in pieces because the non-waterproofed plywood laminations separated.

The next flight that Saturday afternoon May 20th was company co-founder Bill Schweizer who commented after the flight, "It seemed much more controllable. It flew just about like it did then....superbly!"

Ernie not only designed the 1989 reproduction, but directed its assembly. It took the efforts of 69 people; some did the metal parts and the woodworking, and others did the sewing and the doping. (Dope is a liquid solution that is applied to the surface of fabric covered aircraft. It draws the fabric tight by shrinkage, increasing the physical strength of the aircraft through the resulting tautness.)

Paul said, "When the ship was assembled I said to Ernie, 'We have to do a weight and balance,' and Ernie replied, 'We never did weigh the first glider'."

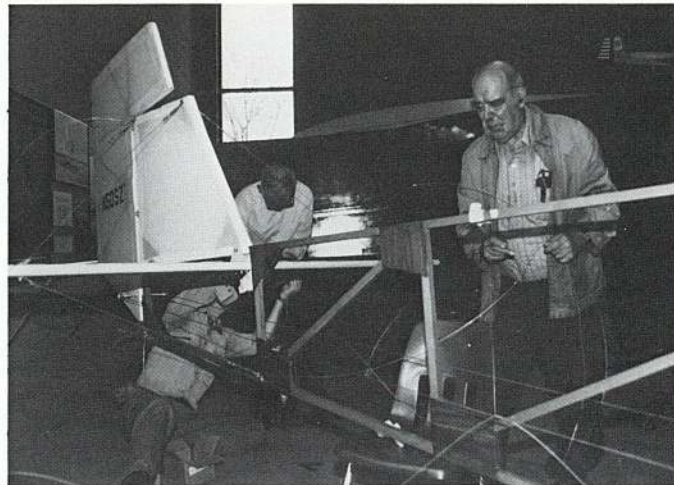
After Paul and Bill's flight, the second generation of Schweizers took over: W. Stuart, Paul H. and Leslie Schweizer who are present administrators and directors of the company that bears their name.

"Kinda neat, sitting out in space in front of everything"... "Very stable" "...Points of reference are different...." "just great," "I don't think that it was as easy for them (the company founders) though. . . a real thrill" were some of their comments after having flown the primary.

After the commemorative flights, the doughty little SGP 1-1 had its dual wheels removed and was taken to the National Soaring Museum where it is on display as part of the 1989 exhibit focus, "The Schweizer Aircraft Corporation — The First Fifty Years."

In 1931, the Schweizers were off to their first competition, the Second National Soaring Contest at Elmira, NY.

After graduation as aeronautical engineers, the two older brothers, Ernie and Paul, formed the Schweizer Metal Aircraft



Ernie Schweizer, right, supervising the assembly and rigging of the 1930 Schweizer SGP1-1 reproduction for the Museum's Exhibit focus. Background center, brother Paul adjusts elevator fitting. Museum staffer assists.

Company to manufacture gliders and sailplanes. Bill was still in school.

The initial company project was the SGU-1-6, the first all-metal sailplane in the world (Schweizer Glider Utility-I place-6th basic design).

In 1938, they developed a two-place training plane, the SGS 2-8 and in 1939, the organization that had operated in the Schweizer barn was moved to Elmira, and renamed the Schweizer Aircraft Corporation.

During WW II, while work was proceeding on a military version of the 2-8, the TG-2, a new production facility was built at what is now the Elmira/Corning Regional Airport. The company was totally engaged turning out military training sailplanes and as subcontractors for other major aircraft companies.

A restored 1942 U.S. Marines LNS-I, an authentic ship of that era, soars again from the center of the Museum's main exhibit hall. It is on loan from Robert Storck, Chantilly, VA. When the war ended, the company shifted back into sailplanes, designing and producing the Schweizer single-place 1-19, 1-21 and the two-place 2-22. There followed a whole family of sailplanes that were internationally recognized for their performance, durability and safety.

The elegant SGS 1-35 high performance sailplane spreads its 15 meter wings to complete the Schweizer thermal in the NSM's main exhibit hall.

The genesis of the Schweizer Aircraft Corporation is tracked with panels and graphics around the central display area.

Exhibit photos show recent company projects such as the AgCat cropduster, the Schweizer 300C helicopter, the 330 Turbine helicopter, the SGM 2-37 motorglider and specialized subcontracting activities for other aerospace firms.

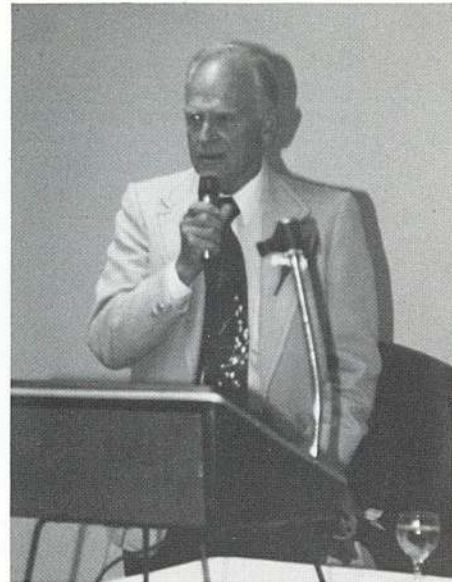
SCHWEIZER SPG 1-1

PRIMARY GLIDER SPECIFICATIONS

Span	32 ft.
Chord	5 ft.
Airfoil	Clark Y
Area	160 sq. ft.
Height	6 ft. 11 in.
Length	18 ft. 2 in.
Aspect Ratio	6.4
Empty Weight	240 lbs.
Payload	170 lbs.
Gross Weight	417 lbs.
Built	1930
Performance	
L/D	9 to 1



U.S. Soaring Hall of Fame Reception in the main exhibit hall at the National Soaring Museum May 27, 1989. Overhead, right, the Schweizer SGS 1-35, left, (6) Marines 1942 Schweizer LNS-1.



Henry Combs, Canyon Country, CA addressing Hall of Fame banquet attendees, May 27th at the National Soaring Museum.



Doris F. Grove, State College, PA recounts some of her soaring experiences at the U.S. Soaring Hall of Fame banquet.

UNITED STATES SOARING HALL OF FAME WEEKEND AT THE NATIONAL SOARING MUSEUM — MAY 26 & 27, 1989

The National Soaring Museum opened its 1989 Exhibit during the United States Hall of Fame festivities, Friday and Saturday, May 26 & 27.

Doris F. Grove, State College, PA, and Henry G. Combs, Canyon Country, CA, were inducted into the United States Soaring Hall of Fame during banquet ceremonies Saturday evening in the Edward A. Mooers Community Room of the National Soaring Museum.

Grove and Combs joined the company of 78 other Soaring Society of America members who have been elected to the Hall of Fame because of their lifetime contributions to the art and science of motorless flight.

Doris Grove, the mother of six, beat almost insurmountable odds to become pre-eminent in soaring. In 1968, Grove suffered a life-threatening illness: recovery was slow and frustrating.

In her talk before the banquet group, she told of her resolution to do something for herself when she was well, instead of devoting all her time to kitchen, house, and family.

She put the last of the kids on the school bus, waved goodbye, and called the local airport to find out how she could learn to fly.

Grove had the audience chuckling as she described her confrontations with a series of reluctant male flight instructors who "don't teach women to fly!" She finally convinced one of her instructors that she was determined to fly, "Even though he went through several aerobatic maneuvers and wound up flying nearly inverted over water, trying to get me to change my mind."

At Penn State University, where she was taking courses in aerodynamics, she was invited to join a local soaring club and soloed in 1972.

Grove kept the 85 banquet attendees laughing with her description of fledgling cross-country attempts, the first of which lasted only three minutes.

Before long, however, she was ridge-skimming cross-country on nearby Bald Eagle Ridge, PA, one of hundreds of corduroy-like mountain links that form the spine of the Appalachians.

Then she started setting a string of women's state and national sailplane records.

On March 11, 1980, she became the first woman to fly out and return, 1,000 km, for an F.A.I. (Federation Aeronautique Internationale) recognized world record.

(In 1982 Doris Grove was awarded the Soaring Society of America's Exceptional Achievement Award-Ed.)

Opening his Hall of Fame Induction talk, Henry G. Combs said, "I started flying a Taylorcraft (power plane) in 1941. I don't think that there was ever a time in my life that I wasn't going to be involved in aviation one way or other.... My first enthusiasm was Lindbergh."

He chose engineering and was associated with Lockheed Aircraft's famous 'Skunk Works' having worked on the U-2, the F-104, and the SR-71 Blackbird projects.

"Power planes are really good to go someplace in," he said, "but if you really want the thrill of flying, there's nothing like the business of competing with the eagles.... It's like comparing it to a double martini, the first time you go up without an engine!"

In a soaring career that spans 25 years, Combs has completed 117 Diamond distance flights in a Libelle (#35) that he purchased in 1967. Four years ago, he flew it on a two-legged hop from California, to Utah, to Wyoming, where he joined his high school class' 50th reunion.

When asked whether he flew in competition, Combs quickly replied, "I get my kicks flying against the environment, not against my friends."

Combs delighted the audience with his witty stories of straight-out cross-country flights and his almost missionary-like zeal in structuring a world record sailplane flight from California. He carried an attache case crammed with facts, figures, meteorological data and charts on a downwind wave flight from California to capture that elusive prize.

With an "it won't be long now" twinkle in his eye, Combs mentioned Mike Koerner's recent flight from California City, CA to

Gaines County, TX, only three miles short of Werner Grosse's distance record.

The 1989 exhibit focus celebrates two anniversaries and an evolution. "The 50th Anniversary of the Schweizer Aircraft Corp." and the "25th Anniversary of the World's First 1,000 Kilometer Sailplane Flight by Al Parker" are stage center along with the "Evolution of the National Soaring Museum".

Visitors to the Museum's main hall are greeted by several examples of Schweizer's aircraft in thermalling formation overhead.

The diminutive, rectangular-winged 1930 SGPI-I primary glider reproduction was the first design of the Schweizer brothers, Ernest, Paul A. and William. It is on loan from the Schweizer organization and was flown May 20th at the Elmira/Corning Regional Airport.

After graduation as aeronautical engineers, the two older brothers, Ernie and Paul formed the Schweizer Metal Aircraft Corp. to manufacture gliders and sailplanes. Bill was still in school. The Schweizer brothers moved to Elmira in 1939 and founded the present company.

The next ship in the Museum's Schweizer thermal is the very rare WW II U.S. Marines LNS-I training sailplane on loan from Robert Storck, Chantilly, VA.

The sleek high-performance Schweizer SGS 1-35 dips to eye-level in the middle of the display showing its elegant 15 meter wings. The bright orange 1-35 is on loan from Robert Gosse, Ithaca, NY. Two other examples of Schweizer sailplanes, the SGU 1-19 and the TG-3A WW II Army Training sailplane, are floor exhibits.

The Schweizer gaggle overhead is complimented by a semi-circle of panels tracing the development of the Schweizer Aircraft Corp. and describing the aircraft and related projects that the company has been associated with through the years.

The NSM marks the 25th anniversary of Al Parker's world-record setting 1,000 km flight with a display on the pilot, his



The 1988 U.S. Soaring Hall of Fame Inductees, Doris F. Grove, State College, PA, front row center left and Henry G. Combs, Canyon Country, CA, front row center right, are flanked by Paul A. Schweizer (1955) Elmira, NY, and Virginia M. Schweizer (1971) Elmira, NY. Standing from left, Floyd Sweet (1963) McLean, VA, William Schweizer (1984) Elmira, NY, and Theodore Sharp (1983) N. Hollywood, CA.

ship and his adrenalin-laced adventure. Hundreds of world class sailplane pilots tried for the elusive 1,000 km goal. Their attempts ended in fields, parking lots, creekbeds, and sometimes in trees. All were frustratingly short of the magic 1,000 km, until July 31, 1964, 25 years ago.

On that morning, Alvin H. Parker, of Odessa, Texas, eased his Len Niemi-designed Sisu sailplane, "Zero Zero Zulu," into a questionable cross-country sky, 10½ hours and 1,041.52 km later, Parker landed at Kimball, Nebraska.

Museum panels trace Parker and his Sisu's 647.17 statute mile dash across Texas, New Mexico, Colorado, and Nebraska, into roller coasting 8,000-foot thermals, down to scraping 700 feet above treacherous box canyons, and finally skirting glider-crunching thunderheads.

"I felt, along with other pilots and the weatherman, that tomorrow would be a better day," Parker said after the flight. "But for some reason, I have to be psychologically ready for flight.... Also, in my experience, a good many days have been missed while waiting for a better one that never came. So I decided that weather was a minor factor."

(continued on page 6)

(continued from page 5)

The National Soaring Museum is highlighted in a sequence on its beginning in 1969 when the Soaring Society of America directors voted to make Harris Hill the official site of the National Soaring Museum, and the designated repository for all its artifacts and memorabilia.

Incorporated in 1972, the Museum's first home was the old Harris Hill Administration Building built in 1936 as a joint project by

Chemung County and Franklin D. Roosevelt's Works Progress Administration (WPA).

The present National Soaring Museum is located on that original site, with the new 12,000-square-foot expansion building covering the area formerly occupied by the County's Utility Building which was razed.

A series of graphics illustrates the Museum's history, its collections, its expansion, and projections for the future.



HALL OF FAME WEEKEND INFORMAL ORAL HISTORY FORUM

A lively discussion during the Hall of Fame Oral History Forum in the NSM Conference Room — From the left Henry G. Combs, Canyon Country, CA; Doris F. Grove, State College, PA; Thomas Knauff, Julian, PA; Felix Chardon, New Hope, PA; Franklin Hurtt, Ithaca, NY; Virginia M. Schweizer, Elmira, NY; and Walter Setz, Upper Darby, PA.

1989 CALENDAR OF EVENTS

Date	Event	Location
July 1-4	Schweizer Aircraft Invitational Regatta for Schweizer sailplanes	Harris Hill/NSM
August 16	Twin Tier Hangarfest Pilot's Outing	Harris Hill
Sept. 2-9	Soaring Society of America Region III Sailplane Championships	Harris Hill/NSM
Sept. 8, 9, 10	Museum Expansion Dedication Weekend Friday Informal reception for SSA Board of Directors, Region 3 competing pilots and crews, competition staff, all Museum members, and other special guests. Saturday SSA Directors' Meeting Oral history video taping Expansion Dedication Ceremony Reception Banquet Program and annual Ralph S. Barnaby Lecture Sunday NSM Trustees' Meeting	NSM
Oct. 7, 8, 14, 15	Fall Foliage Weekends	Harris Hill/NSM
Oct. 14	4th Annual "Kitecitement" Kitefly	NSM/Harris Hill
Nov. 24, 25	46th Annual Snowbird Sailplane Regatta	Harris Hill/NSM
Dec. 8	Community Soaring Committee Luncheon	NSM
By Reservation	NSM Educational Outreach Programs: "History Of Soaring" "The Wright Brothers and the Beginnings of Soaring" "The Glider War, 1940-45"	As Requested

VINTAGE SAILPLANE REGATTA

HARRIS HILL GILDERPORT SAT. & SUN., MAY 27 & 28



Leonard W. McClain's Cherokee, Vintage Sailplane Regatta first prize winner. The fierce looking Indian warrior McClain painted on the nose made the sailplane a stand-out with photographers.



Pilot Bruce Barrett eases the WW II Pratt Read TG-32 in during the Vintage Sailplane Regatta. This ship is distinct in that it was the only training sailplane with side-by-side seating and was the only training glider designed for the Navy. That's the Loon from Jeff MacNelly's cartoon, "Shoe," painted on the P-R's nose.



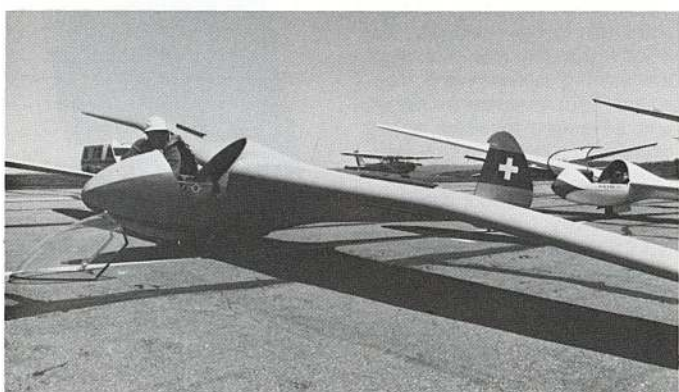
Jan Scott's Slingsby Cadet Model III, T-31, two place former RAF Trainer on final during the Vintage Sailplane Regatta, May 27 & 28 at Harris Hill. The T-31 has a glide ratio of about 17 to 1 and is the only one in the United States.



Mark Drake's Schweizer 1-26 A #21, "Blackbird" Vintage Sailplane Regatta Second Place winner. Drake said that his friends call it "Blackjack" because of its production number.



Leo Schober's Breguet Fawette 905-S, the only one of its kind in North America, comes in for a landing at Harris Hill.



Albert Uster's Gull Wing Moswey III on the starting grid at the Vintage Sailplane Regatta during Hall of Fame Weekend at Harris Hill. The ship is the only one in the United States and was first built in 1943 in Switzerland.

THE NELSON HUMMINGBIRD'S THEATRICAL LAST MINUTE ENTRANCE

It was 1 p.m. Friday, May 17th....It was just seven hours before the Museum's 1989 exhibit would open and a reception honoring the United States Soaring Hall Of Fame inductees would be held.

The exhibit was in place. The formation of Schweizer sailplanes and gliders were suspended overhead silently proclaiming their places in motorless flight history; the Parker World's First 1,000 km Flight panels illustrating and graphing his four-state odyssey were arranged and the story of the NSM's evolution was chronologically pictured.... All seemed in readiness,...Until a flatbed truck pulled up to the Museum's back entrance with a newly completed cradle assembly for the 1953 Nelson Hummingbird Motorglider. The ship was donated to the NSM last Fall by Ed Knight, Perrysburg, Ohio, and the Exhibit Committee was anxious to show it.

Paul A. Schweizer designed the cradle. It had been on order for some time and it became questionable whether it would be ready for the targeted May 27th weekend.

Every warm body that could be mustered was immediately pressed into service. The heavy welded steel components were wrestled off the truck and snaked into the exhibit hall. A diamond cutters steadiness was required in moving the Hummingbird's 24 foot wing panels and its 22 foot fuselage off its trailer in the new storage section and into the main hall. The outside area connecting the two was not yet surfaced. The switch necessitated easing the ship's parts down a one foot drop to a lumpy, muddy apron, negotiating a 90 degree left, then balancing over a three foot gap, bridged by a 2" x 6", thence to the exhibit hall.

"Easy...easy," reverberated through the building as the bird was inched past kiosks, exhibits, and pillars.

More help was needed...The ship had to be aligned with the cradle, then hefted over its fittings onto a grooved track.

It was getting late in the afternoon and some of the Trustees were already beginning to arrive for the weekend festivities and their annual meeting.

Jackets and ties came off; Gene Hammond, Manooka, IL, Floyd Sweet, McLean VA, and Ted Sharp, N. Hollywood, CA, reinforced Paul Schweizer and his Exhibit Committee. By this time the main floor looked like a miniature Near-Eastern religious festival, with outstretched hands gently guiding and nudging the sleek red bird among its peers. About this time, Museum Services Manager Mary Flaspahler noticed a fellow at the front door who, on admission, said that he was on his way to a wedding in Ohio. He had heard about the Museum and this was his first opportunity to stop by.

Good-hearted Mary said that the Museum was officially closed for the day, but that it would be okay if he wanted to look over the balcony railing. Fascinated by the proceedings, he was soon down on the main floor.

Paul Schweizer, thinking the wedding-bound visitor was a Museum volunteer, spontaneously assigned him a task with the maneuvering team.

A couple hours later Mary asked where the fellow that she admitted had gone, and was surprised to see him perspiring like a stevedore at work on the Hummingbird with everyone else!

The final phase was completed at 5:30 when the last turnbuckles were adjusted to center the "Bird" on its display stand — ready with 2½ hours to spare.

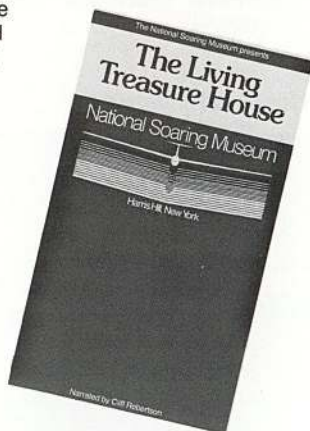
Hope our visitor got to the Ohio church on time!

ON THE COVER

Ernest Schweizer, in the light shirt, checking over the Schweizer SGP 1-6, the world's first metal sailplane, 1937. The 50th Anniversary of the Schweizer Aircraft Corp. is part of the National Soaring Museum's 1989 Exhibit Focus. (Photo by Hans Groenhoff)

From the NSM Gift Loft

Here is your special video tour of The National Soaring Museum narrated by actor, writer, director and sailplane pilot, Cliff Robertson. You will see the largest exhibit of contemporary and classic sailplanes in the world and rare NSM archive film clips of some of the soaring pioneers and their gliders. Experience the romance and adventure of silent flight with this 27 minute jewel. Order now; fill out the coupon and mail it, along with your check or money order, to NATIONAL SOARING MUSEUM, Harris Hill RD #3, Elmira, NY 14903



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If you have historic memorabilia and excess or duplicate publications, send them to the National Soaring Museum for cataloging and archiving.

Share your collection of Soaring artifacts and reminiscences with interested succeeding generations.

Address: Shirley Sliwa, Director
National Soaring Museum
Harris Hill, RD #3, Elmira, NY 14903

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The National Soaring Museum is an affiliate of The Soaring Society of America and, as such, is the official repository for all its artifacts and memorabilia.