

NSM

A Quarterly Journal
of the National Soaring Museum

Fall, 1978

Vol. 2, Number 4



From the Director

Work on exhibit development for the new museum building has gone forward since the museum's official opening last September 9th, 1978. Readers will recall that construction on the building itself was not completed until the day prior to the opening and that the exhibits which were in place on that occasion were put there on a temporary basis. The NSM's exhibit design team, headed by Tony Bâby, who oversaw the design and development of all exhibits at The Smithsonian's National Air and Space Museum, has told us that exhibitry for our first year will be in place and ready to go by early spring. Meanwhile, museum volunteers are busily at work on several aircraft projects, chief among which is the completion of the restoration work on the Bowlus-duPont Albatross.

Now that the museum has adequate physical facilities for the exhibition of soaring artifacts and memorabilia, we are anxious to further develop our collection. While the museum already has a fine group of aircraft, there are many significant ships that we would very much like to add to our collection in the years ahead. A list of these aircraft appears elsewhere in this magazine. The list is not comprehensive and I hope that people feel free to make comments and suggestions on it, just as I hope that those who may be able to help the museum acquire a ship appearing on the list will make themselves known to us. Similarly, we are very interested in expanding the museum's collection in other areas. High quality models of gliders and sailplanes, two and three dimensional art, archival materials, and personal memorabilia are all things in which we are very interested. I hope that our members will help us in our efforts to collect, either by letting us know when they hear about some item they think we might be interested in or in offering items for which they have no further use or which they think might be appropriate for the museum.

The museum aims to collect actively in all the above areas so that a collection that is truly representational of soaring can be developed for future use and enjoyment. To be successful we will continue to depend largely on help from you, our members and supporters.

All museum members should circle May 19th, 1979 on their calendars for that is the date of our Annual Hall of Fame Weekend this year. As in the past, two distinguished soaring pilots will be inducted into the United States Soaring Hall of Fame. Other well known soaring people will also be present to help all of us know more about our sport. New this year, however is the fact that we will have the resources of the museum facilities to draw upon to enhance people's enjoyment of the weekend. The next issue of NSM will carry details of the event and we hope that as many of our members as possible will be able to be with us. The middle of May is a lovely time to be in upstate New York — See you then!

ON THE COVER:

Two Minimoa sailplanes at the 1938 National Soaring Contest at Harris Hill, Elmira, New York. Number 25 flown by Richard C. duPont and Number 42 flown by Chester C. Decker and owned by Lewin B. Barringer, 1st manager of the Soaring Society of America.

(Photo: Hans Groenoff, N.Y.C.)

CALENDAR

NASA/SSA SYMPOSIUM

The 3rd. International Symposium on the Science and Technology of Low-Speed and Motorless Flight will be held at the NASA Langley Research Center in Hampton, Virginia on March 29th and 30th. The program will include:

Low-Speed Aerodynamics

Advanced Instrumentation

Motor Soaring

Optimal Flight Techniques

Structures and Materials

Ultralight Sailplanes and Hang Gliders

For further information, contact Perry Hanson, Mail Stop No. 340, NASA Langley Research Center, Hampton, Virginia 23665.

ANNUAL HALL OF FAME WEEKEND

May 19 and 20, Elmira, New York
and National Soaring Museum
Board of Trustees Meeting

NSM/SSA HOMEBUILDERS CONFERENCE

The National Soaring Museum and the Soaring Society of America are co-sponsoring a Homebuilders' Conference during the Labor Day weekend, September 1, 2, & 3 in conjunction with the Annual Vintage Sailplane Regatta at Harris Hill, Elmira, New York. There will be further information in the next issue of the NSM, in the meanwhile save this weekend on your calendar and plan to attend what is planned to be an exciting and fun weekend.

NSM is a publication of the National Soaring Museum, Harris Hill, RD 1, Elmira, New York 14903. Anyone is invited to contribute material and pictures with identification about historical soaring activities, renovation of old sailplanes, soaring pioneers, unusual uses of sailplanes, etc. Manuscripts are subject to whatever revisions, additions or deletions are necessary to make the material conform to the space limitations and standards of NSM. Material that is to be returned must be accompanied by a stamped, self addressed envelope. No compensation other than credit will be made.

Publisher — National Soaring Museum
William D. English, Jr., director

Editor — Shirley Sliwa

Use Your Film Library

THE BARRINGER TROPHY

by William D. English



THE BARRINGER TROPHY:

Most Soaring Society of America members know that it is a trophy of "modernistic design" awarded annually to the pilot making the longest straight line distance soaring flight during the year. It has been won by some of the greatest soaring pilots in the United States. Those who read the SSA Directory closely know also that the trophy was presented to the SSA through a provision in the will of Lewin B. Barringer who, in 1937, became the first Editor of **Soaring Magazine** and the Society's first employee with the title of General Manager.

Most recent converts to soaring probably know little more than that about Barringer who, with Warren Eaton, Richard duPont, Ralph Barnaby, and a handful of others, was instrumental in promoting the SSA and soaring during the 1930's. Most soaring pilots are not aware that the Barringer Trophy itself was the product of two of the most distinguished and gifted Americans in the field of design, Eliot Noyes and Isamu Noguchi.

In this article I will recall some of Barringer's more significant contributions to soaring and bring out some of the details surrounding the creation of that trophy.

Born in Wayne, Pennsylvania in 1906, Barringer learned to fly in 1929 and began flying gliders in 1930 as operator of the Wings Gliding School near Philadelphia. His first soaring

flights took place at Elmira during the 1934 contest. In 1935 he went to Iran as pilot for the Harvard Archaeological Expedition and served in that capacity through 1936. While flying in that then primitive country, Barringer had to make his own charts, still a marvel of cartographic skill.

Following his return to the United States, Barringer became almost immediately active in the affairs of the SSA which had been established officially some four years before. He was persuaded by his friend Richard C. DuPont, then president of the SSA, to assume the title of General Manager of the SSA and to edit a new magazine **Soaring**. In both capacities he performed with distinction.

As a flier he was by all accounts superb. This stood him in good stead as he led SSA soaring expeditions to various parts of the country to demonstrate that it was possible to fly great distances over flat country (Expedition to Wichita Falls, Texas 1938) and to great altitudes in the mountains using a strange form of lift we now know as mountain wave (Expedition to Mount Washington, New Hampshire 1938 and later Sun Valley), thus vastly opening up exciting opportunities for a sport that had for too long been limited to a very few places like Elmira, New York, Frankfurt, Michigan and Torrey Pines, California.

(Continued on Page 4)

The Barringer Trophy

(Continued from Page 3)



1938 Expedition to Wichita Falls, Texas: Barringer answers all questions and brings forth his maps and notes on the Tulsa leg for the benefit of the Oklahoma City newsmen.

In 1940 Barringer published **Flight Without Power**, still a most useful and interesting book on motorless flight and which served to inform thousands about the sport and its intricacies.

With the outbreak of war and the great success of the German glider attacks in Crete and Belgium, the American military became anxious to develop the capacity to mount a glider invasion of its own. Barringer, a Reserve Officer in the army, was called to the colors by General H.H. (Hap) Arnold, Commanding General, United States Army Air Forces and told to create from scratch an American glider force capable of delivering thousands of troops on a pre-specified target.

It was in his capacity as head of the glider branch of the United States Army Air Force that in January, 1943 Lewin Barringer lost his life in a plane crash in the Caribbean. Mammoth production and training problems had caused tremendous difficulties in creating the glider force, but prior to his death Barringer had worked doggedly on these problems and developed the resources that eventually allowed entire divisions to be transported by glider into combat.

In his will, Barringer established the terms of "The Barringer Trophy" and stated, "It is my desire that my executors purchase a beautiful trophy such as a silver soaring bird on a stone base, to be in sufficiently good taste to look well on a table or desk in someone's living room. I do not want a cup, the usual form of such trophies." (*New York Times*, Sunday, July 10, 1949).

Barringer numbered among his friends Eliot Noyes, who now begins to play a significant role in the trophy story. Noyes and Barringer had met in 1935 in Iran where Noyes was the draftsman for the archeological expedition. Noyes recalled for me that many evenings he and Barringer spent talking about soaring while seated among the ancient ruins of Persepolis. Upon the conclusion of the expedition in 1937, Barringer and Noyes returned to the United States and soon thereafter Barringer taught Noyes to fly in a Franklin Stevens at Wings Field near Philadelphia and at Empire, Michigan. The two men flew together from time to time in the years following as time permitted. Barringer, of course, was continuing to pursue his career in aviation and in writing, and Noyes was beginning to gain recognition as a talented architect and designer.

When Barringer went to the Pentagon, he asked Noyes to serve on his staff and until Barringer's death the next year the two men worked closely together to develop the army's glider program.

A recently uncovered letter of March 21, 1949, from Noyes to Don Pollard, the first winner of the Barringer Trophy, tells the rest of the story:

.... "In his will, Lew left some money for "The Barringer Trophy" with a few very general suggestions as to what it should look like. His brother, Brandon Barringer, asked me if I would be willing to procure something suitable.

After the war I returned to my old jobs in architecture and design around New York and began to look for trophy material. As I looked in the standard sources for these things, all I could find was large grotes-

que gilt mugs of various sorts which are common types of trophies, but which you'd hardly like to have around the house. There seemed to be nothing suggesting the feeling of flight or of gliders and even nothing just simple. Everything depended on this bad kind of art junk, which we all see everywhere. In a sporadic fashion, I kept up the search for several years unwilling to buy such routine stuff.

One day a friend of mine, who was a sculptor, turned up for a visit. I asked him if he would be interested in turning out something special for me and he was. I showed him a lot of glider photographs and told him a good deal about soaring. He began to get very excited about it. The name of the sculptor is Isamu Noguchi. He is an American born of Japanese parents. He is one of the most famous modern sculptors alive and I think you may well have heard or read of him. *Life* recently had an article of several pages about his work. He has an exhibition in New York now and has done some of the sculpture on the Radio City Buildings.

The trophy is about half pure sculptural forms and half glider forms. I don't believe the wing would prove to be much good by wind tunnel tests, but it is still a wing form to any glider pilot. It is also a handsome and sensitive form to any sculptor. Its shape is determined partly by the subject of flying, partly as a form in a set of forms which include the flat base and the ebony standard. As a whole it is a serene and simple statement about flight. I've had the trophy in my house for a week or so, and I have found it very handsome and satisfying to live with. Perhaps this isn't a fair test because I am half glider pilot and half designer, so maybe it suits me better than anyone else. I do think you'll see what I mean though, and I'm writing this because I want you to know that you have won something rather special as a work of art."

Writing in the *New York Times* for Sunday, July 10, 1949, art critic Aline B. Louchheim, saw fit to use the occasion of the award of the trophy as a chance to compare Noguchi's efforts with those trophies awarded in other athletic contests. The headline read in bold type "A New Kind of Trophy", "Noguchi's Abstract Form Relief From Inanity". Louchheim had glowing words for the new trophy saying, "Only once as far as I know, has a distinguished American sculptor been called upon to design an athletic trophy"... the "simplicity

and serenity and obvious appropriateness of the trophy are undeniable. In contrast to other trophies it represents a remarkable achievement."

The magazine *Industrial Design* for September 1949 noted the creation of the new trophy in this way:

.... "There is no reason why art should be odd in a trophy, but unfortunately it is. Most of the statuary awarded to noteworthy Americans is outdated enough to suggest they should have accomplished their feat fifty years ago, ugly enough to suggest that the feat wasn't worth accomplishing anyhow. Thanks to Lewin B. Barringer, however, glider pilots have something better to look forward to: an honest piece of sculpture by Isamu Noguchi.

The result (of the collaboration between Noyes and Noguchi) is a remarkable sculpture . . . , a pair of aluminum wings sixteen inches wide, soaring on an ebony shadow above a black anodized base."

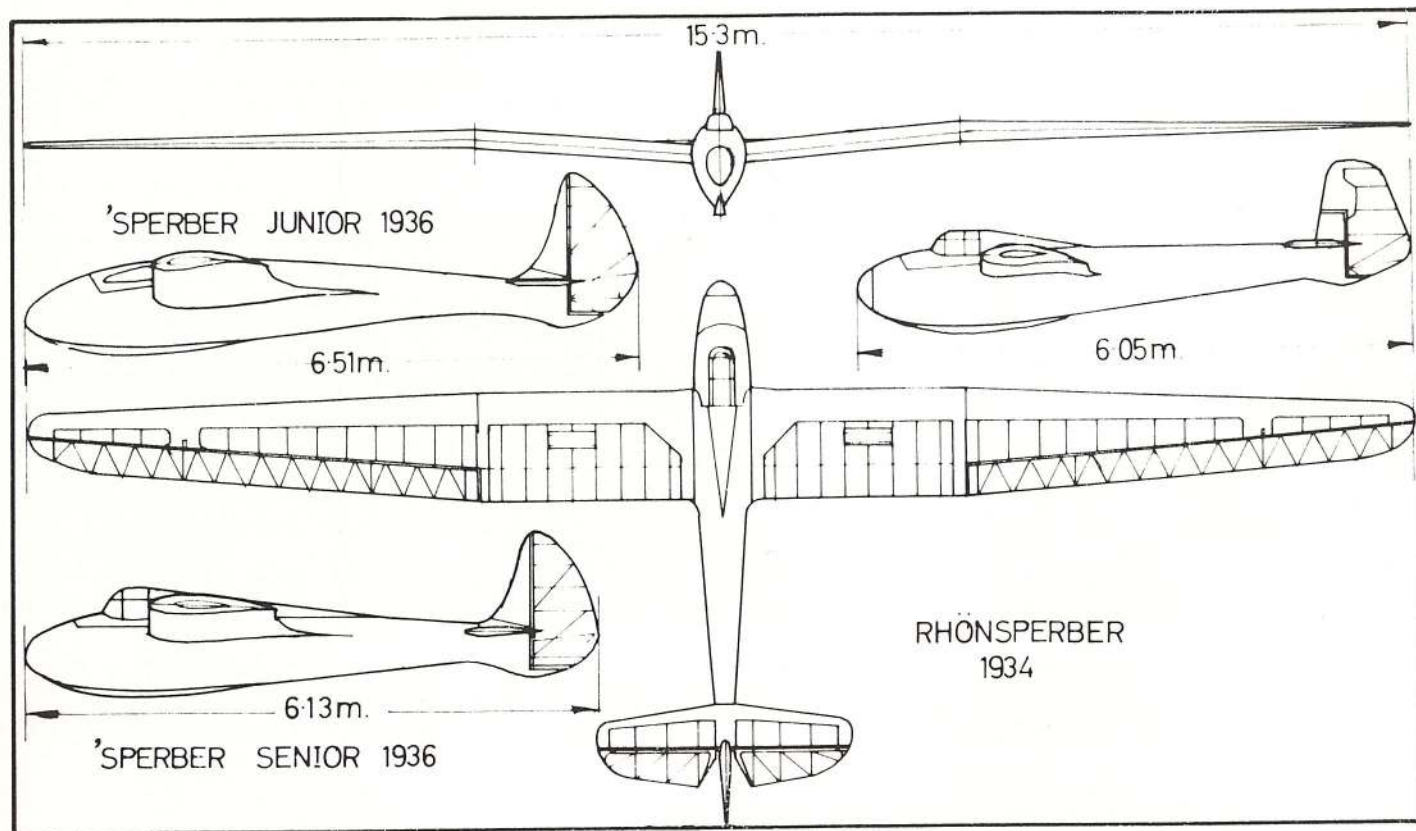
In the years since Don Pollard won the trophy in 1948, many of the most distinguished American soaring pilots have had the honor of winning the trophy. Indeed Paul Bikle won the trophy for three consecutive years in 1952, 1953 and 1954 and under the terms of the deed of gift, became the permanent possessor of the trophy. When this occurred, Bikle graciously presented the trophy back to the Soaring Society as a perpetual trophy thereby allowing pilots to continue to compete for this elegant expression of soaring flight.

Noyes, who became one of America's most distinguished architects and industrial designers, continued his interest in aviation and soaring and indeed eventually became the architect for the National Soaring Museum, finishing that task just prior to his death in 1977. Noguchi, too, continued his development as one of America's finest sculptors and continues to be a prolific creator of magnificent art.



The Rhonsperber

By Martin Simons



In 1934 there were one or two serious mid-air collisions between sailplanes, as increasing numbers of pilots learned to circle in thermals. With upwards of sixty aircraft competing in the annual Wasserkuppe contests, it is surprising there were not more accidents of this type. Most of the sailplanes of the time allowed the pilot only a restricted view from the cockpit. The Rhonbussard, for instance, had quickly become a popular club sailplane but the pilot sat immediately under the wing and had no upward view whatever. In a turn, he could not see where he was going. Hans Jacobs realized the danger, and his next design, the Rhonsperber, was his answer.

He aimed again for a cheaply produced sailplane that could be turned out in large numbers, yet with a good cross-country performance. The wing was aerodynamically similar to the Bussard, with the same aerofoil section, Gottingen 535, and similar planform but of greater span, 15.2 metres instead of 14.3. Some of the increase in span was achieved by mounting the wings on either side of the fuselage at shoulder level, instead of joining them together above the pilot's head. The cockpit was, like that of the Bussard, roomy enough for almost all pilots, but there was a teardrop shaped, enclosed transparent canopy giving a good view all round.

To retain adequate ground clearance at the wing tip, the main spar was given the now familiar cranked or 'gull' form, and tidy fairings were added to smooth the airflow at the root. Instead of having to join the wings together first, and lift the assembly onto the fuselage pylon, each wing of the Rhonsperber was connected to the fuselage separately. A very strong carry-through structure was incorporated into the main fuselage frame; two horizontal tapered steel pins joined the spar of each wing to this. A third drag pin was needed aft. Six pins were thus required to assemble the whole wing, then various fairings, including one that bulged out over the main fittings under the 'arm pit', were needed to complete the job. The tail unit resembled that of the Buzzard, but was slightly larger. Two horizontal steel rods running athwart the rear fuselage, joined the tailplane to the rear frames.

The 'Sperber was stressed for aerobatics and could be flown safely up to 200 km. per hour. It was regarded as a fast cross-country machine, although its wing loading was less than the Bussard. The improved fuselage and greater span did give it a better performance and in accurate flight tests its best glide ratio was found to be 21.6 : 1. Although modest against the very advanced designs coming from the

academic flying groups of the universities, this was an excellent figure for a relatively simple club machine which could be bought off the shelf. The type entered series production in 1935 at Flugzeugbau Schewyer, and about a hundred were produced altogether before manufacture was discontinued in 1938.

The first pilot to show what the new aircraft could do was Ludwig Hofman, who achieved several good cross-country flights immediately after taking delivery of an early production model. Starting from the Hornberg on one such occasion, he ended the day across the frontier in Switzerland. All his hopes were realized on the very first day of the Rhon contest that year. The world distance record stood at 375 km., it had been made by the great Heini Dittmar almost exactly a year previously in the most refined aircraft of the time, the Fafnir 2. Hofman followed a similar route but went almost a hundred kilometres further into Czechoslovakia, landing at Olesnice after 474 km. It was the first soaring flight over 400 km. ever made, and even 500 km. began to seem within reach. Hofmann's exploit would have been remembered longer if it had not in turn been exceeded within the week. On 29th July, four gliders reached Brno, further still into Czechoslovakia, and the new record stood at 504.2 km. One of the four was a Rhonsperber, piloted, not by Hofmann, but by Hans Heinemann, one of eight others who were competing in the new type.

The Rhonsperber, however, was not free from teething troubles. During this Wasserkuppe meeting most of the pilots hurriedly added spoilers on the upper surface of the wing, and on the sixth day all nine were grounded when a technical analysis and inspection revealed an unexpected weakness in some of the fittings. It says a great deal for the spirit of the Rhon meeting that all pilots agreed to cancel flying for the day, and everyone turned to help the Rhonsperber crews to replace the defective metal parts. By next day all were serviceable again.

As usual, the record flights stimulated sales and by the next yearly meeting, the 'Sperber was the most popular type on the Wasserkuppe. Several had been exported, one to England, where it quickly established a fine reputation. Flown mostly by Christopher Nicholson, it challenged and sometimes beat Philip Wills' new Minimoa.

In Germany, the cross country tour of 1936 was won by Dittmar in his Condor, but Rhonsperbers placed second and third, and Dittmar, in a 'Sperber managed a remarkable flight, later in the year, across the Alps into Italy. In May 1937 Paul Steinig, taking off from Grunau and contacting the Moatzagotl wave, reached the cast altitude of 5,760 metres, beating Dittmar's cloud flight climb of 4,350 m. at Rio de Janeiro the previous year. Steinig was thus the first pilot to achieve what is now 'diamond' altitude, but for technical reasons this was not officially recognized. The flight was, nonetheless, the first to use wave lift to break a record.

Apart from its good performance, the Rhonsperber was much used for air displays and aerobatics. Ernst Udet, a rising star in the new Luftwaffe, flew his own personal 'Sperber at the Berlin Olympic Games display in 1936. His machine like most others at this period displayed the Olympic interlocking circles on its nose; the word Kommandant was stencilled on the rear fuselage. Udet also went to the international meeting at the Jungfrau, and flew his Rhonsperber among the spectacular mountains.

Ideas, however, were advancing rapidly. Leading pilots were demanding better and better aircraft. The Rhonsperber was an excellent basic design that lent itself to development. Hofmann called for a bigger machine - bigger cockpit, larger span, higher aspect ratio. Jacobs, in time for the 1936 Rhon, had built for him the 'Sperber Senior, with a span of 16 metres, an entirely different wing section, giving a better glide ratio at a higher airspeed without spoiling the soaring performance. Hofmann later took this superior aircraft to America and in the tradition of that country, allowed himself

to be photographed for the National Geographic Magazine flying near and over New York. Hofmann, in his early training, had been the despair of his instructors, who advised him to give up all thought of being a pilot. He crashed on several occasions and injured himself seriously in a Zogling, but persevered and suddenly, after a power flying course, made the grade. Now instead of being a trial, he was a recognised ace and wrote articles on flying which his erstwhile instructors could read.

On the other hand, the Rhonsperber fuselage was too large for some. Little Hanna Reitsch had to pad the cockpit well to get her head up to the cockpit coaming. For her, Jacobs designed the beautiful 'Sperber Junior. The airfoil was again Gottingen 535, but the span was stretched to 15.6 metres. The fuselage was tailored perfectly to Hanna's figure. The result was an improvement of the glide ratio to 24.3 and a very worthwhile reduction in sinking speed. The Sperber Junior was decorated with a 'sunburst' colour scheme which set a fashion in spectacular decoration. The Junior reverted to an older type of cockpit canopy, wooden with two elongated portholes out of which Hanna could peep. In some respects, this aircraft was a forerunner of the great Reiher which Hanna was to fly in 1948.

Two further developments of the Rhonsperber followed: the Habicht, smaller, stronger, faster, a specialized aerobatic type, and the Kranich, which first appeared as a two seater version of the Rhonsperber. With these, Jacobs' reputation as a designer was to near its peak.

So far as is known, only two Rhonsperbers survive. One is in complete and airworthy condition at the Wasserkuppe museum in Germany, the other is being rebuilt in England from the remains of Nicholson's machine. There may be others hidden away.

TECHNICAL DATA			
	Rhonsperber	Sperber Senior	Sperber Junior
Span	15.2m	16.0m	15.6m
Wing Area	15.3m ²	16.2m ²	15.9m ²
Aspect ratio	15.3	15.8	15.3
Weight empty	162 kg	180 kg	170 kg
Flying weight	255 kg	285 kg	260 kg
Wing loading	16.9 kg/m ²	17.6 kg/m ²	16.0 kg/m ²
Aerofoil. Root	Gottingen 535	Gottingen 757	Gottingen 535
Tip	Gottingen 409	Gottingen 676	Gottingen 409
Best glide ratio	21.6:1	22.7:1	22.5:1



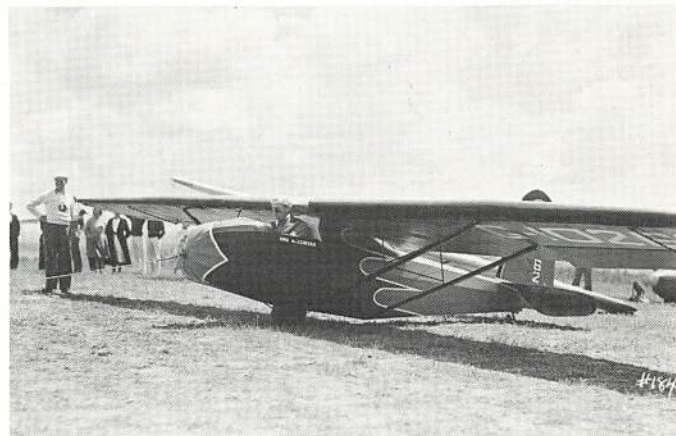
1938 National Champion Emil Lehecka on tow during the Ninth National Soaring Contest at Harris Hill, Elmira, New York.

Editor's Note: This article first appeared in AUSTRALIAN GLIDING in September, 1975 when Mr. Martin Simons was the Editor of that publication.

WANT LIST

The National Soaring Museum is actively trying to improve its exhibits of significant aircraft, artifacts and collections. We would appreciate any help in this area whether by donation or information on whom to contact. Below is a list of aircraft the Museum would like very much to add to its collection. As noted by the Director in his report, this list is not comprehensive and it is hoped that people will feel free to make comments and suggestions on it.

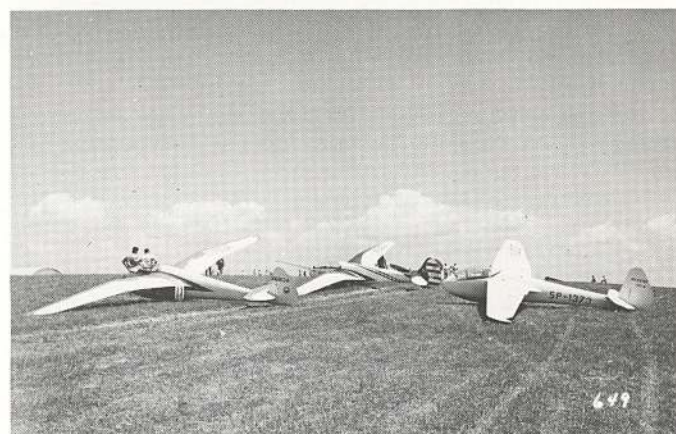
1. Franklin PS-2
2. Baby Bowlus
3. Zanonia
4. Pratt Read
5. Schweizer SGS 1-7
6. Schweizer SGS 2-22 or 2-33
7. Libelle
8. State of the art 15 meter ASW-20, Mosquito, Vega, etc.
9. State of the art open class Numbus, 604, ASW-17
10. L-K 10A
11. Cherokee II
12. HP-11 or HP-14
13. Orlik
14. CG-4A
15. Cadet (Baker-McMillen)



CADET UTILITY GLIDER: 1936 photo of Emil Lehecka seated in the Baker-Millen manufactured ship from the designs of Mr. Frank Gross.



FRANKLIN PS-2: Designer and manufacturer Mr. R.E. Franklin of Ypsilanti, Michigan confers with Frank Hawks.



Left: ZANONIA, Center, Prototype for the LAISTER-KAUFFMANN, "YANKEE DOODLE", Right: ORLIK. Photo from the 1941 Nationals at Harris Hill, Elmira, New York.



BOWLUS BABY ALBATROSS: 1938 Nationals Contestant, Jack O'Meara, Minneapolis, Minnesota.



LIBELLE: 1974 photo of Bill Holbrook flying his Libelle (WH) to win the Smirnoff Sailplane Derby.

Recent Museum Acquisitions

During 1978, the museum was fortunate to have been given two wonderful aircraft, a Don Mitchell Nimbus and the prototype 2-32, OOR.

The Schweizer 2-32 was the generous gift of Mr. P.J. Baugh of Lexington, Kentucky. The aircraft, which has been fitted with the special long wings developed for Joseph C. Lincoln and extensively instrumented and outfitted for high altitude flight is expected to join the museum's active flying aircraft engaged in research in the near future.

The Mitchell Nimbus, a contribution of Mr. and Mrs. Enno Pechnik of Colusa, California was built by Don Mitchell. The ship is a fine example of the type which was initially designed in 1956. A small aircraft, smaller than the well known 1-26, for example, it had a L/D in the mid-thirties and was a fine performer.

The museum is proud to add these fine ships to its collection.

Museum's Research Aircraft

The Museum's CIBOLA, Schweizer's 2-32, serial No. 11, known to many as "Joe Lincoln's 2-32" is currently stationed with the Flight Research Laboratory at Princeton University, James Forrestal Campus, New Jersey. This well instrumented aircraft is being used in an independent investigation of gliding performance while circling. Concurrently, Junior year students in an applied aeronautics course have been tasked with the preliminary design of a 15 meter sailplane as a term paper.



CIBOLA: Landing at James Forrestal Campus after a relicensing test flight. Pilot Steve Sliwa, a Princeton alumnus, returned from graduate school at George Washington University/NASA to make the flight.

How the SGS 2-8 Became the Military TG-2

In 1937 when the Schweizer Glider Sailplane 2-8 was conceived, there were no production two place sailplanes and just about all the training was done by the single-place method. The Airhoppers Club, the largest club in the Metropolitan New York area, was interested in getting a 2-place ship for their club, so the Schweizers agreed to build them one. This was first flown in 1938 and brought to the National Soaring Meet at Elmira where it was flown by Jack Brookhart.

The Soaring Society of America had decided to sell the Ross Ibis and get a 2-place which could be used by General Manager Lewin Berringer for promotional and demonstration flights. The Schweizers delivered this ship, No. 2, at the 10th National Soaring Meet in Elmira, July 1939. In order to transfer the ship to the SSA, a bill of sale had to be authorized by a local attorney. Bob McDowell, the attorney, suggested that the Schweizers move their plant to Elmira. He arranged support from the community, and the Schweizers moved to Elmira in December of that year, 1939 and incorporated into the Schweizer Aircraft Corporation.

The Schweizers first step was to get the 2-8 Aircraft Type Certificated by the FAA and set up production for the aircraft. The 3rd ship was purchased by a group from Buffalo, which included Stan Smith and Howie Burr, both still active soaring pilots. They gave the Schweizers permission to use this ship for the static tests and other flight tests needed to get the ATC. The next ship was purchased by Dick Johnson, who flew it to 3rd place at the Nationals in 1941.

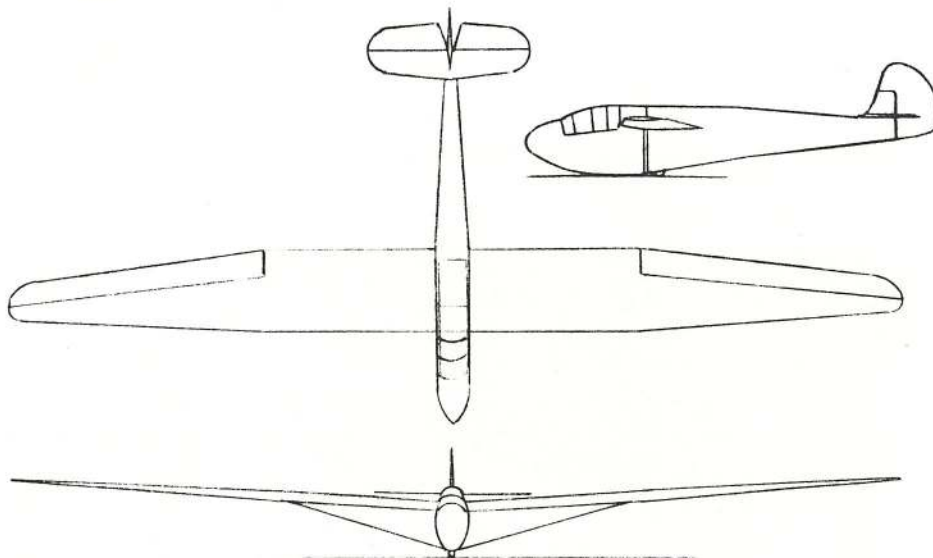
Lewin Barringer got an invitation from the Harrimans to try soaring at Sun Valley, Idaho. The Union Pacific provided free transportation for 2-8 No. 5, and Johnny Robinson and

Lewin Barringer made several record flights while they were there. This ship was later bought by Joe Stienhauser of Chicago and was used to train Marine pilots.

Soon after the invasion of Belgium by gliders, the Schweizers were contacted by the Air Force to provide military gliders, and the Schweizer Aircraft Corporation received an order for the first group of 2-8's which were designated the TG-2. There was very little changed on these ships except the paint job. They accelerated the production on the 2-8, but U.S. Army Air Force and should have been given the TG-1 designation. They accelerated the production on the 2-8, but due to the restrictions on the use of metal for training aircraft, the Schweizers were told that they had to switch to wood and other non-strategic metals, and consequently received a contract to develop the TG-3 for the Army. The TG-3 was phased into production after about 55 of the TG-2's had been delivered.

In general, the 2-8 was a fairly rugged ship and had good performance for that time. Bob Stanley and Ernie Schweizer made a National two-place distance record in 1940 in a 2-8 and Dick Johnson broke this record, also in a 2-8 after the war with a 300 mile flight out West. The initial 2-8 had a spin accident, and in order to make the ship more stable the Schweizer Aircraft Corporation put additional wash-out on the wings. It was a good military trainer but was rough on the Instructor who did not have very good visibility from the rear seat. The post-war 2-22 corrected this problem, and was later modified to the present production 2-33. If you put a 3-view of the 2-33 over the 2-8, there is not much difference except for the seating arrangement and the high wing location.

Shirley Sliwa



Span
Length
Wing Area
Aspect Ratio

52 ft.
25 ft. 3 in.
214 sq. ft.
1:12.6

Empty Weight
Gross Weight
Sinking Speed
Gliding Angle

452 lb.s
860 lbs.
2.6 ft./sec.
23:1



(Photos from the Loomis Collection)

THE ARMY TG-2.



The Navy also adopted the TG-2 as a trainer for the war time glider program and designated it the LNS-1.

A BRIEF HISTORY OF SOARING as depicted on early Elmira cachets

by Simine and Jim Short

Editor's Note: This edited article first appeared in the October 1978 issue of THE AIRPOST JOURNAL. Definition of cachet: a sketch or picture on the left side of an envelope which commemorates an event. It can be a rubber stamp, printing, or a photo.

The first organized Meet in the United States was the 1930 National Gliding and Soaring Contest held in Elmira, NY. The Champion was Albert Hastings flying a Franklin glider.

In 1931, at the second National Contest, a rubber cachet and a special gummed label were printed to promote the sport of soaring, and to make it better known to people outside the Elmira area. The Meet was again won by Albert Hastings flying a Franklin glider. It is noteworthy, that with this Meet, Elmira was being called the "Glider Capitol of America".



ELMIRA, NEW YORK
AUGUST 2-16, 1931

Elmira - the Glider Capitol of America

In 1932 the Elmira Stamp Club thought of another way of advertising for the glider Meets. A crew of stamp club members had a table set up at the Post Office and applied a rubber stamp: "Third Annual National Gliding and Soaring Contest, Elmira, NY July 11 to 24, 1932, Soaring Society of America" to every letter and for anybody that desired to have this cachet. It is not known, how many covers were prepared in this manner, and how many of them eventually found their way into collections. Jack O'Meara won this Meet flying a Darmstadt "Chanute" sailplane.

Third Annual National Gliding
And Soaring Contest,
ELMIRA, N. Y.
JULY 11 to 24, 1932
SOARING SOCIETY OF AMERICA.

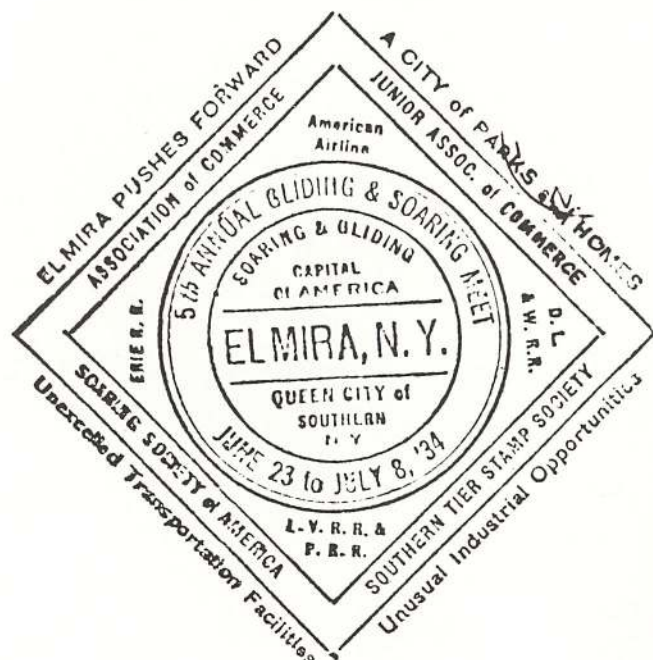
The Elmira Stamp Club got an early start for the Fourth National Gliding and Soaring Meet in 1933. After permission was secured from the Postmaster General to carry "Official U.S. Glider Mail", rubber stamps were prepared; Warren Eaton was handed a mailbag to fly down to the valley below, which is now the Chemung County Airport. Members of the Stamp Club drove the bag so precious to them, to the Post Office, where the Postmaster informed them that the Post Office Department had cancelled its approval of the "Official" mail. The words "Official U.S." had to be blackened out on these flight covers before the Post Office would process



them. This was done, and no other covers were flown during the next days of the contest, though further mail-carrying flights had been planned. The Meet was won by Stanley W. Smith, flying a Franklin glider. Years later, in 1957, he won another National Contest, this time flying a Schweizer 1-21 sailplane.

At the Fifth Annual Meet in 1934 two different cachets were used. One cachet designed by members of the Elmira Stamp Club, showing a stylized sailplane typical for those days, was applied at Harris Hill while the Chamber of Commerce applied its own cachet at the Post Office. Richard C. duPont won this contest and the 1935 Nationals flying the Bowlus-duPont Albatross.

National Soaring Contest



In October 1934, American Airlines began to include Elmira into the regular CAM (Contract Air Mail) Route between New York City and Buffalo. The Stamp Club commemorated this event with a picturesque cachet, showing a street in downtown Elmira with a powerplane and, of course, a couple of sailplanes.



For the 1935 contest, the 1933 cachet was revised and applied to mail during the Meet. On the first day, mail was flown to the airport, where it received a backstamp. This one had been used during the 1928 airmeet at the Elmira Airport, which was located in those days at Caton Avenue, on Elmira's Southside.



In 1936 an older cachet was again revised; this time the one from 1934, depicting the now famous glider "Albatross" which had now won the Nationals for three consecutive years. (ed. This famous glider is now completely restored and on exhibit in the National Soaring Museum.) This time the champion was Chester Decker. The first permanent soaring site at Harris Hill had its opening celebration during this Meet.



There are not cachets known for the eighth and ninth Meet,

1937 and 1938. (ed. Subsequent research has uncovered hand stamps commemorating these Nationals, won by Richard C. duPont flying a Minimoa and Emil Lehecka flying a Rhonsperber, respectively.)

1939 marked an Anniversary year, it was the Tenth National Gliding Contest which took place in Elmira. A very special cover was prepared by Fred Loomis, a member of the Elmira Stamp Club and well-known photographer in the Elmira area. He was the official photographer during the Soaring Contest. He designed an envelope showing a glider over the Big Flats valley below Harris Hill. It is possible that the stylized glider on the cover might be the Ross-Stevens Zanonian. The backstamp used appears to be the "Sun Spot" utility which made its first appearance at the 1937 Meet. The 1939 Meet was won by Chester Decker flying a Minimoa.



It is not known if the stamps designed for the 11th and twelfth National Contests were ever used on envelopes. The annual Meets were suspended from 1942 to 1945 during World War II years. (Continued on Page 14)

A BRIEF HISTORY OF SOARING . (Continued from Page 13)

The 15th National Gliding Contest, June 30 to July 11, 1948 was the second post-war contest to be held in Elmira. Sailplane technology showed great strides and the ships at this Meet were definite forerunners of the sleek sailplanes of today. The cachet shows a stylized "modern" ship. The Meet was won by Paul MacCready, Jr., later World Champion, flying a Polish Orlik sailplane.



The 1949 Meet in Elmira was a repeat of the previous year, in that it was again won by Paul MacCready, Jr. flying his Orlik.



By this time Meets were taking place all over the United States.

After a one year lapse, the National Meet was held in Elmira again in 1951. Members of the Stamp Club tried to publicize this Meet with a newly designed cachet, which was subsequently used again in a slightly revised form during the 24th contest in 1957. This time the cachet was applied in two colors. During the first day of the Meet, on July 2, the cachet was applied in black and on subsequent days in green. The National Champion was Richard H. Johnson flying his RJ-5.



In 1959, the new logo of the "Elmira Area Soaring Corporation" (E.A.S.C.) was being incorporated into the rubber cachet.



The 30th contest, July 2-11, 1963 was the last Meet held in Elmira to have stamp club commemoration. Dick Johnson won the championships again this year, flying a Skylark 4.



JULY 2 - 11, 1963
30th National Soaring Meet

Cachet Courtesy of
Elmira Stamp Club

In 1978, the opening of the New National Soaring Museum seemed to be an appropriate moment to repeat the "first Official U.S. Glider Flight" of 1933 which was not permitted to be "Official". This time everything went according to "Hoyle". Warren E. Eaton Jr. was the mail-carrier and Paul A. Schweizer was the pilot, flying the same route as Warren Eaton did during the Fourth National Soaring Contest in 1933. It was another step in the history of soaring in Elmira.



The writers would like to thank the many friends, fellow-collectors and soaring enthusiasts who helped make this article possible. It is by far not a complete soaring history; lots more research needs to be done. Comments are invited.

Another step in the history of Soaring at Elmira was taken last fall. The Elmira Stamp Club, the Soaring Society of America, and the National Soaring Museum have suggested to the United States Postal Service to have a stamp issued in 1980 commemorating the 50th anniversary of Soaring Meets in America. A special booklet was prepared showing photos, three-view drawings and giving the history of nine significant sailplanes in American Soaring History. The Stamp Development Branch made the suggestion that a historical glider would be a more appropriate design to show than a modern high performance sailplane. Two committee meetings have been held, and we are still in the process of being evaluated.

If you have any suggestions or ideas about having a "SOARING STAMP" please send your comments to the National Soaring Museum or directly to the:

Citizens Stamp Advisory Committee
U.S. Postal Headquarters
Washington, D.C. 20260

and give us the support we need to make this stamp a reality. How would you like to get a letter next year, carrying a stamp showing a sailplane next to your address?????

First Region III Association Meeting

On January 27, 1979, the National Soaring Museum, the Harris Hill Soaring Corporation and the Schweizer Aircraft Corporation were pleased to co-host the first function of the new Region III Soaring Association, which was a Safety Seminar featuring Mr. Derek Piggott. Mr. Piggott is the Chief Instructor of the Lasham Gliding Society in England and one of the foremost writers and speakers on the subject of Soaring Safety.

We were most fortunate to secure Mr. Piggott for this event prior to his engagement at the Annual Soaring Society of America's National Convention, held this year in Chicago, Illinois.

Participating panelists were Bernard Carris, Chief Instructor Schweizer Soaring School, John Gill, Chief Instructor Harris Hill Soaring Corporation, Edgar Seymour, Chief Instructor Rochester Soaring Club and Glider Pilots Ground School, Moses Acee, competition pilot and member of HHSC, Tom Smith, Smitty's Soaring Service, Clinton, NY, and Roy McMaster, record holder and competition pilot.

Leading the discussion at various intervals were William English, Director of the National Soaring Museum, Michael Teter, President of the Harris Hill Soaring Corporation, James Short, Schweizer Aircraft Corporation and Paul Schweizer Regional Director for the Soaring Society of America.

There were 92 in attendance at the Seminar from all areas of the Region and the event has been evaluated as a major success. The main purpose of the Association is (1) To provide for social and educational events for the enjoyment of soaring pilots and their families, (2) to make it easier for clubs to run soaring contests in the Region by sharing the responsibility, and (3) to promote the interest in soaring and improvement in safety through meetings and symposia. The National Soaring Museum is pleased to have had some small part in the inception of this Association and wish it continued success and growth.

Last NSM Issue:

MUSEUM MEMBER? CAPITAL DEVELOPMENT CONTRIBUTOR?

A number of museum members have written to ask why their name was not included in the list of contributors to the museum's capital development campaign that was published in the last issue of this magazine. To date, in each case the individual involved had been a loyal supporter of the museum through our membership program but had not, in fact, contributed to the specific appeal that was made to allow for the construction of the new building. Funds that were raised through the capital program were earmarked specifically for construction of the building and its exhibits, while the museum's immensely important membership program provides for vital ongoing support. We will be publishing a list of our current members in the next issue of NSM and hope that all of the museum's supporters understand how very much we appreciate their help. The museum wouldn't exist without it.

CORRECTIONS

I wish to correct one noted misspelling in the list of Building Fund donors, that of: Paul E. Nissen.

STOP! I apologize. In preparing the coverage of the Dedication Weekend for the last NSM, I overlooked one of the highlights of the Hall of Fame Banquet program; that of Karl Striedieck's talk on the International Championships at Chateauroux, France. Those of you who have heard him speak before are now wondering how I could have possibly had such an oversight. Unfortunately I did and I take this opportunity to publicly apologize to Karl. His dissertation was well received by those who attended our festivities.

Shirley Sliwa, Editor

Help Support The National Soaring Museum

- Membership
- Capital Program
(Building & Exhibits Funds)
- Artifacts
- Collections
- Archives
- Participation
- Attendance

Philosophy of the National Soaring Museum

(The National Soaring Museum was created in 1969 when the SSA Board of Directors authorized the Harris Hill Soaring Corporation to establish and operate the National Soaring Museum, Archives, and Library. In 1972, the National Soaring Museum was chartered by the New York State Education Department as an educational institution, and a separate non-profit corporation was set up at that time to conduct its activities. The activities of this Corporation are carried out by a Board of Trustees through a Director.)

The National Soaring Museum exists primarily to fulfill two major functions: (1) That of preserving the heritage of motorless flight in the United States, and (2) That of promoting a greater knowledge of gliding, soaring, and related aeronautics and physical sciences among the general public.

Motorless flight has played an important role in the realization of man's age old dream to fly. It can be said with assurance that man would not have taken to the air had it not been for the gliding experiments of many distinguished and inspired men. Over the years, aerodynamic and meteorological breakthroughs of major significance have come about through the efforts of men and women who were fascinated by the concept of using natural forces to fly. Gliding and soaring has grown increasingly sophisticated and performance has increased markedly since the days of the early pioneers. The National Soaring Museum will show that motorless flight has contributed to the overall history of man, and that this history is inspiring, instructive and one that needs telling.

The Trustees of the National Soaring Museum believe that the education of the general public in aeronautical subjects is a fundamental need in a technologically oriented society. In recognition of this, the Museum will provide educational programs that will emphasize the contribution that soaring and aeronautics have made to the whole society.

Scattered through the United States are masses of important material that need collecting, preserving and interpreting. The National Soaring Museum will provide the facilities and staff to bring this material together into a useful collection. The Trustees of the Museum are aware that they bear a heavy responsibility to the future for the preservation and transmission of this rich harvest of aeronautical lore.

The National Soaring Museum further believes that it has the duty of promoting a greater knowledge of motorless flight and related aeronautics among the general population, using whatever techniques seem appropriate to that end. The Museum intends to devote considerable effort to the task of trying to bring the general public into touch with the spirit as well as the more factual aspects of motorless flight.

The National Soaring Museum intends to become active in the life of the local community as well as the nation as a whole. The NSM believes that it can provide valuable service and cultural enrichment to the many who visit the Museum.

Nonprofit Organization

U.S. POSTAGE

PAID

Permit No. 10

Big Flats, N.Y.

National Soaring Museum
Harris Hill, R.D. 3,
Elmira, N. Y. 14903