



NSM

A Quarterly Journal
of the National Soaring Museum
Summer 1989 Vol. 12, Number 1



FROM THE EDITOR:

This year, it seemed that Summer season started before summer officially arrived.

With the coming of June, waves of school children visited the Museum as part of history and science field trips or because the class outing was planned for Harris Hill and a trip to the Museum and glider field added an educational dimension to the day.

As part of their tour the children visited the Museum's Edward A. Mooers Theatre where they saw cinemaphotographer's Chris Woods' video, "The Quiet Challenge" about soaring at the Barron Hilton Ranch in the Sierra Nevada Mountains. The diminutive viewers seemed transfixed as the high-performance sailplanes zoomed into their consciousness on the big video screen. You could almost see their imaginations working; strapping themselves into the big Nimbus II cockpit behind The Netherlands' Kees Musters on his soaring record cross-country bid.

We were visited by twenty-five school groups in June, ranging from pre-schoolers (Goofy's Glider) to university undergraduates (specialized programs, history, motorless flight, etc.).

Sam and Loretta Fine, Glen Wild, NY stopped by the Museum early in June. On July 9th, 1943 F/O Sam Fine became the first American to land in occupied Europe. He was one of 30 U.S. volunteers American glider pilots who flew gliders into Sicily with the British. On this mission he became the first American to land a glider in combat in WW II.

He was wounded three times, was captured and escaped after overpowering his guards. Fine is one of only 17 surviving glider pilots authorized to wear British Glider Pilot Wings.

The Fines were here to arrange a 1991, fiftieth anniversary mini-reunion of the National WWII Glider Pilots Association. (The wartime program was inaugurated by Gen. "Hap" Arnold at Harris Hill in the Summer of 1941).

As a matter of curiosity, we checked the NSM Guest Book to see how many nations were represented from Memorial Day/Hall of Fame Weekend, to mid-August.

We had visitors from: Costa Rica, France, Italy, both East and West Germany, Brazil, Sweden, Japan, Ireland, the Ukraine, Indonesia, The Soviet Union, both Chinas, Switzerland, Spain, Belgium, Denmark, India, Pakistan, as well as from outlying America; Alaska, Hawaii, Puerto Rico, Guam, and the Virgin Islands.

The National Soaring Museum is ideally situated in the New York Finger Lakes area between the great ports of entry along the Northeast corridor. It is on one of the main tourist arteries to Niagara Falls and Canada, so we can expect many more nations to be represented by year's end.

Thus far, Museum attendance is up by over 10% from 1988.

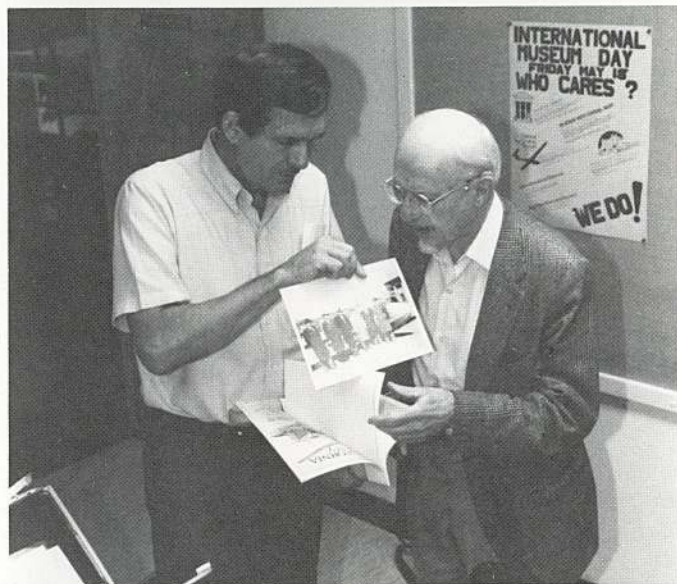
June 14 and 15 The National Aeronautics and Space Administration SARSAT van visited the NSM. The large, walk-through trailer featured six exhibits that detailed, COSPAS/SARSAT, an international cooperative search and rescue project between the United States, Canada, France (SARSAT), and the Soviet Union (COSPAS). The United States program includes NASA, The National Oceanic and Atmospheric Administration (NOAA), the Coast Guard and The Air Force.

Of particular interest in the van were highlights of four "rescues." A computer enhanced world map traced the steps in locating and rescuing survivors of an aircraft crash in California, five boaters lost in the Caribbean, a race car driver lost in southeast Africa and two boaters lost off Tenerife in the Canary Islands. In each case the distress signal was picked up by satellite, a coordinating center notified, the rescue team alerted and lives saved. Also on exhibit were the EPIRB (Emergency Position Indicating Radio Beacon) and the ELT (Emergency Locator Transmitter) carried by mariners and aviators. When an accident occurs, these transmitters are automatically activated to send distress signals to the satellite.

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Part of the National Soaring Museum's Summer display at the Steele Memorial Library, Elmira, NY.

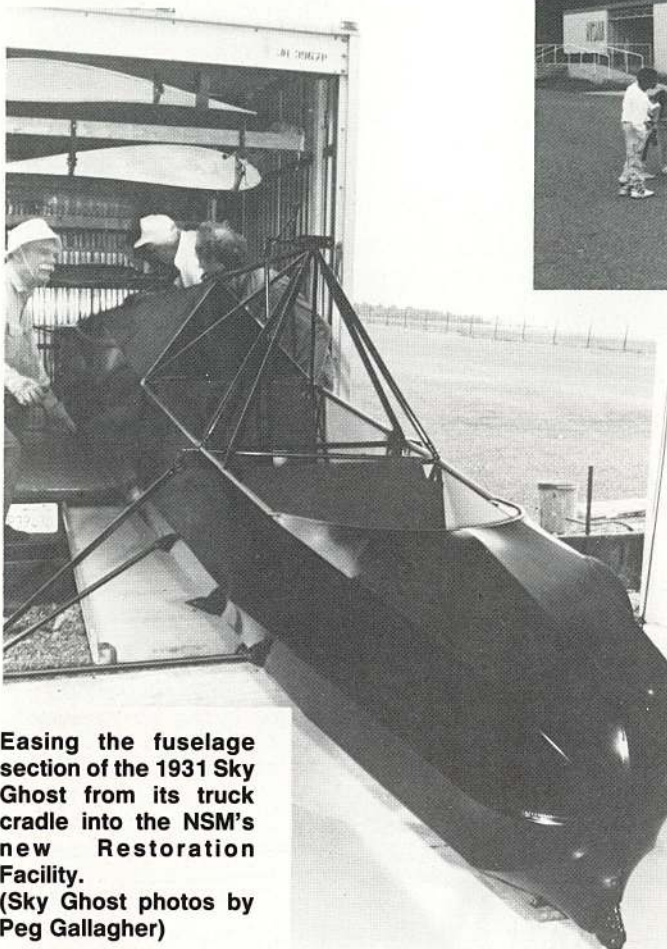


Bernard Gross, left, and his father, Frank R. Gross, check old photos during a Summer visit to the NSM.



During a recent visit Sam Fine, Glen Wild, NY, the first American to land a glider in combat (in Sicily) during WWII recalls the mission from an NSM library volume as wife Loretta looks on.

Schoolchildren awaiting a tour of the NASA SARSAT van at the NSM last June.



Easing the fuselage section of the 1931 Sky Ghost from its truck cradle into the NSM's new Restoration Facility.
(Sky Ghost photos by Peg Gallagher)

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Genial SARSAT lecturer Robert (Bob) Buckley, a retired U.S.A.F. Air Rescue Service pilot, kept over 550 visitors fascinated with his displays and comments during the van's two day visit.

Buckley has logged over 8,000 hours and has flown over every continent in the world.

Independence Day weekend saw the fun-filled Schweizer 50th Anniversary Sailplane Regatta at Harris Hill gliderport, with over 20 Schweizer sailplanes of all vintages and models competing for trophies.

Pilots' meetings were held at the Museum and participants, crews, and their families were invited to tour the facility. The soaring event closed with a pig roast gala at the Schweizer factory on the evening of the Fourth that included singing, dancing, and high comraderie.

During July and August the Museum's Summer outreach programs were in full swing with Aerogami for day-campers, Summer Cohesion groups, the Steele Memorial Library System and slide/lectures for senior citizens and service clubs.

Everyone at the NSM was looking forward to Monday, August 7th.... That's the day the restored, 1931 Gross Sky Ghost, the first two-place glider built in America was due to arrive on the hill.

Monday morning saw a huge U-Haul van parked in front of the Harris Hill cabins, adjacent to the Museum. Bill Robie, who headed the Sky Ghost project had driven the van from Greenville, North Carolina and had bunked overnight in one of the cabins. Unfortunately, that night, the temperature had dipped to the low 50's, ending a week-long, hot, humid, low.

Bill's cabin door opened, and with a "gawdawmightydayem," a blue, shivering form emerged. After about a half fathom of hot coffee Bill told us that he had arrived very late and definitely was not dressed for the near Fall-like weather that had befallen him.

When he had backed the van to the Restoration facility and swung the tailgate, we saw the disassembled Sky Ghost, cocooned like antique statuary.

The jet-black fuselage squatted on its blocked-up, unconventional two-strut undercarriage with the glistening silver wings packaged overhead and tail group enveloped securely at the rear.

With the generous backing and advice of the original builder, Frank R. Gross, it had taken Robie and his East Carolina University assistants, Wilma Barnkill, Professor Walter Calhoun, Joseph Hughes, Colin Bentley, Colin Barnett, John Hawa, and John Ghee, three years to complete the project.

As staff and volunteers gently eased different parts of the bird out of their protective coverings and positioned them for assembly on the Restoration area floor, Bill would comment on the research and work involved with that component.

Bill agreed to write an article on the restoration program which will appear in the next NSM.

When the Sky Ghost was fully assembled it looked like it was ready for the flight line and another hop over the Chemung Valley, where it flew so gracefully 57 years ago.

With the completion of the Expansion Dedication festivities, the next NSM project is the Fourth Annual Kiteciment kitefly, Saturday, Oct. 14th. Judges have been chosen, and volunteers have been assigned for registration and entrant classification. Interest seems to be running high with phone calls from as far away as Michigan....More about the Kiteciment results in the Fall NSM.



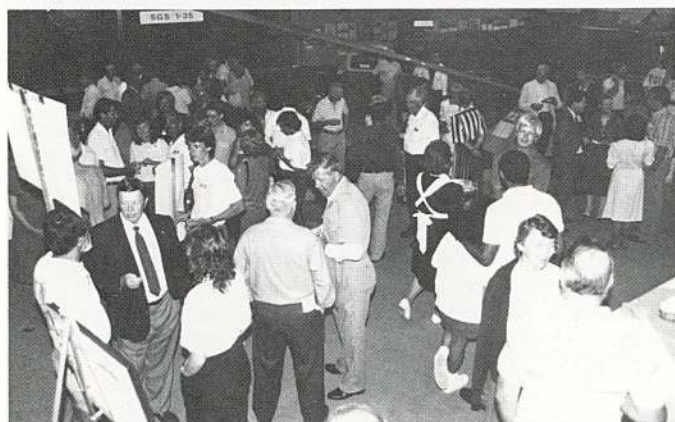
Bill Robie, Washington, DC, directs NSM staff and volunteers assembling the Gross Sky Ghost in the new NSM Restoration Facility.



Two of three Harris Hill Soaring Corporation sailplanes in a fly-by salute at dedication ceremonies for the new NSM expansion.



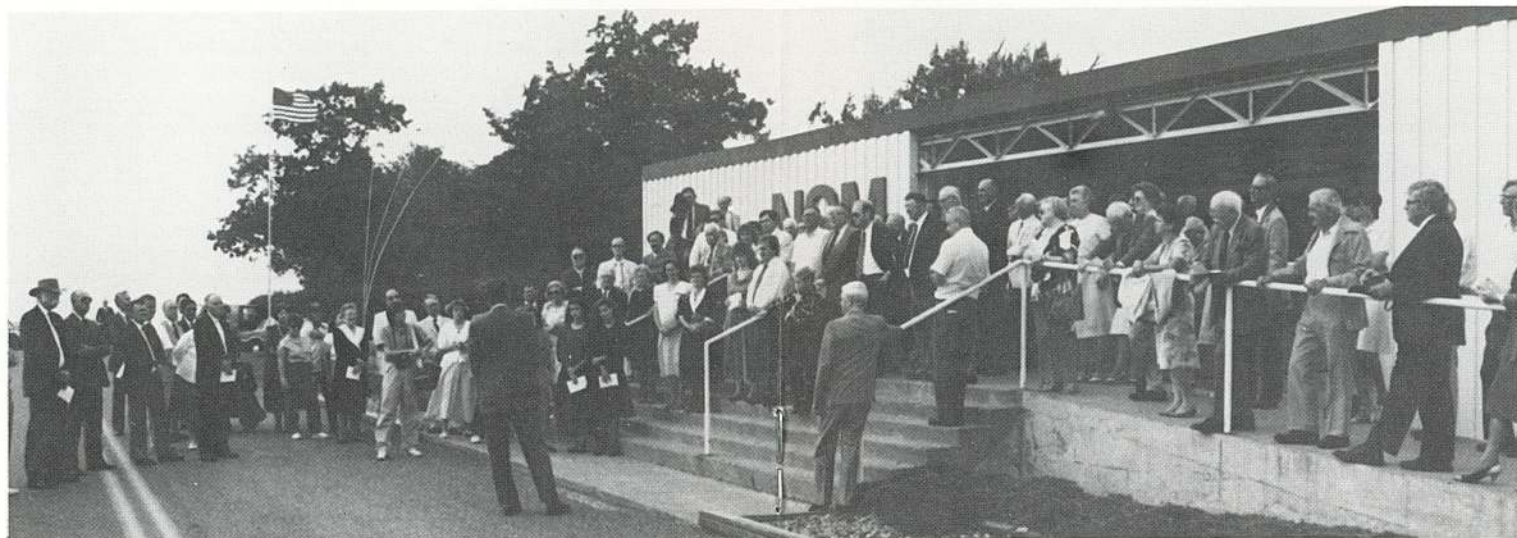
The Summer meeting of The Soaring Society of America Board of Directors, in the NSM's Edward A. Mooers Community Room during the Expansion Dedication Weekend.



Friday evening's informal reception for SSA Board of Directors, Region III competing pilots and crews, competition staff, Museum members and other special guests.



Harris Hill Soaring Corporation members, from left, Tim Welles, Wm. Guerry Howard, Sue Bury, Moses Acee, Sophia Acee, John "Corky" Gill, and Rolf Beyer at Friday night's informal reception.



Dedication ceremonies outside the National Soaring Museum preceeding the official Expansion ribbon cutting.

WE DID IT!.....SEPT. 9, 1989....

It took five years of concentrated study, planning, fund-raising and finally building, before it came to be; but on Sept. 9th the new 12,000 square foot National Soaring Museum expansion was dedicated and opened to the public. Thanks to the perseverance and guidance of the NSM Expansion Steering Committee, the Board of Trustees and the work and financial support of individuals and institutions, committed to the preservation of America's soaring heritage.

The celebration started Friday, the 8th with an evening reception at the Museum, co-hosted by the Harris Hill Soaring Corporation and the NSM, for The Soaring Society of America Board of Directors, SSA Region III pilots and crews, Museum members and special guests.

Saturday, The SSA Directors held their Summer meeting; and, an Oral History taping session was held in the new Gross Sky Ghost Classroom. At 5:30 that evening, a whistling tree-skimming, triple-sailplane salute announced to the soaring world

that the dedication was to begin. Pilots, Corky Gill, Monty Sullivan and Tim Welles, of the Harris Hill Soaring Corporation, executed the spectacular crowd-pleasing fly-by.

Bernald S. Smith, Fremont, CA, Chairman of the Expansion Steering Committee, first introduced New York State legislators and Chemung County officials to the gathering outside the Museum.

Next, MC Smith called upon SSA President, William C. Sproull, Bloomington, MN, who said, "Our members come from the four corners of the country....We're proud of you; this is soaring....This is where we come from....This is our history. We know through our efforts what it takes to do this kind of thing. We appreciate having been invited to hold our meetings here...and we appreciate being a part of it."

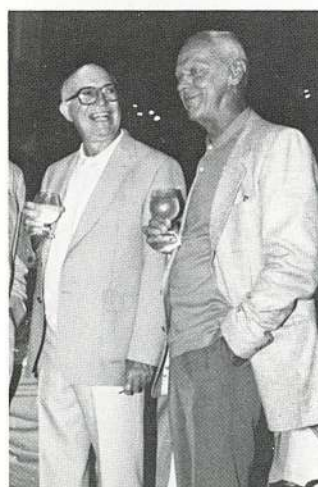
Museum Director, Shirley Sliwa, was given special praise by the Chairman for her continuing efforts in making the expansion possible.

President of the Harris Hill Soaring Corporation, William Guerry Howard, Horseheads, NY, spoke of the twenty-year association of that club with the NSM.

He mentioned how visitors to Harris Hill could not only see the history of motorless flight at the NSM but could experience the adventure of soaring flight from the adjacent gliderport.

Paul A. Schweizer, Elmira, NY, Honorary Chairman, NSM Expansion Committee, was next to be introduced, by Smith, who

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Pioneer Sailplane builder and designer, Jack W. Laister, Apple Valley, CA, chats with 1989 Barnaby Lecturer, William S. Ivans, La Jolla, CA, at the NSM/Harris Hill Soaring Corporation informal reception Expansion Dedication Weekend.



SSA President, William C. Sproull, Bloomington, MN, left, with NSM President John C. Lincoln II, and his wife SSA President-elect Judy Ruprecht Lincoln, at the NSM Expansion Dedication Reception.



From left, Tom Knauff, Julian, PA, David Welles and daughter, Ann, Elmira, NY, Charlie Spratt, Charlotte, NC and newest U.S. Soaring Hall of Famer, Doris Grove, State College, PA, at the Friday evening reception.



Expansion Dedication reception Saturday evening in the NSM's main exhibit hall.



NSM President John C. Lincoln II, left, greets past NSM presidents, from the left, Theodore E. Sharp, N. Hollywood, CA, Theodore M. Sprague, Corning, NY, Floyd J. Sweet, McLean, VA, Paul A. Schweizer, Elmira, NY, and kneeling, Bernald S. Smith, Fremont, CA. Not pictured, Philip J. Baugh, Nicholasville, KY and Lee L. Robbins, Horseheads, NY.



NSM past president Lee L. Robbins, Horseheads, NY, with Academy Award winner, corporate spokesman, sailplane pilot, and NSM Support Committee member Cliff Robertson, East Hampton, NY at the Expansion Dedication Reception.



William S. Ivans speaks on "Soaring: A World Perspective," the 16th Annual Ralph S. Barnaby Lecture.

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said, "If Elmira is known as the 'Soaring Capital of America,' then I guess that we can say that Paul Schweizer is, 'The Father of Soaring In America'....."

Schweizer responded that it was eleven years ago to the day, that the present building was dedicated.... "It was twenty years ago in Marfa, TX," he continued that the SSA directors authorized the establishment of the National Soaring Museum here on Harris Hill as a permanent repository for its artifacts and memorabilia...

NSM President, John Lincoln II, Paradise Valley, AZ, recalled his father, author/anthologist and sailplane enthusiast, Joseph Coleville Lincoln's fascination with the panorama of flight and how highly he would have regarded this Museum for its preservation of flight lore.

The 200 people gathered on the Museum's portico, moved to the Museum's main gallery where, amid flashing cameras and whirring camcorders, Paul Schweizer officially dedicated the new \$1.2 million expansion. He joined other dignitaries snipping the bright red ribbon — opening the new section that increases the Museum's size to 28,000 square feet. This ribbon is the original used in 1978 NSM dedication and the dedication of the Edward A. Mooers Theatre in 1985.

The newly completed building includes an Education and Research Center with Classroom, Photo Lab/Darkroom, Archive Storage, and an expansive Sailplane Restoration Facility. Administrative offices and restrooms are also located on this level. Glider storage space and an Exhibit Workshop are on the lower level. Both levels are accessible by elevator.

Major donors to the expansion were recognized with words of congratulations given by family members or friends of donors:

Ralph S. Barnaby Archive Wing - Walter H. Setz, Upper Darby, PA

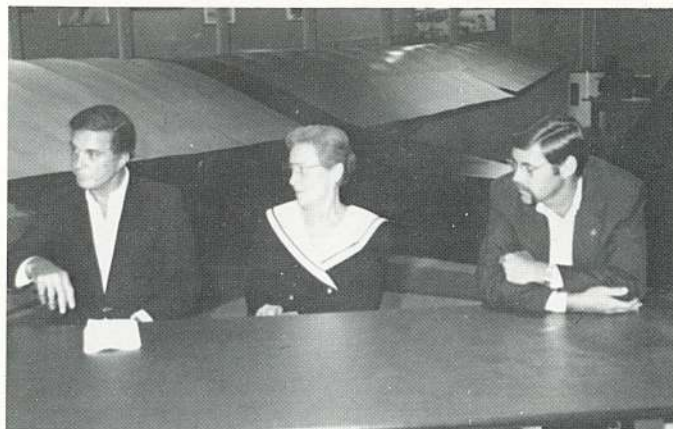
Joseph C. Lincoln Memorial Library - John C. Lincoln II, Paradise Valley, AZ

Hilton Honors Gallery - Hannes Linke, Inglewood, CA

Gross Sky Ghost Class Room - Frank R. Gross, Akron, OH

Scott M. Daniel Memorial Dark Room - Peter R. Daniel, Simpsonville, SC

Jon D. Carsey Photo Laboratory - Floyd J. Sweet, McLean, VA



Actor, director, writer Cliff Robertson, Museum Director, Shirley Sliwa, and NSM President John C. Lincoln II, field questions from the media at the Expansion Dedication press conference.

Schweizer Gallery - William Schweizer, Elmira, NY

David C. Johnson Memorial Exhibit Workshop - Richard N. Hall, Jr. Boulder, CO

The 16th Annual Ralph S. Barnaby Lecture given by William S. Ivans, LaJolla, CA, followed the evening's Dedication Reception and Banquet. Ivans is a past President of SSA and Lifetime President of Honor of the International Gliding Commission and an internationally recognized soaring authority. His subject was, "Soaring: A World Perspective," and will be reviewed in a separate story.

That evening, Frank R. Gross announced his intention of having a trust established, which will be administered by the National Soaring Museum, for a Gross Sky Ghost Youth Achievement Award. The proposal is for awards to be made locally until the trust value increases and the awards can be expanded to the national level. Program particulars are being developed by the Gross family and the NSM Trustees.

Academy Award winner, corporate spokesman, sailplane pilot and NSM Support Committee member Cliff Robertson was given a Steuben Eagle for his narration and professional advise on the Museum's video, "The Living Treasure House," and his continuing efforts in promoting soaring.

Expansion Steering Committee Chairman, NSM Trustee, and SSA Board Member Bernald Smith was also honored with a Steuben Eagle for his determination and tireless leadership of the NSM Expansion program.

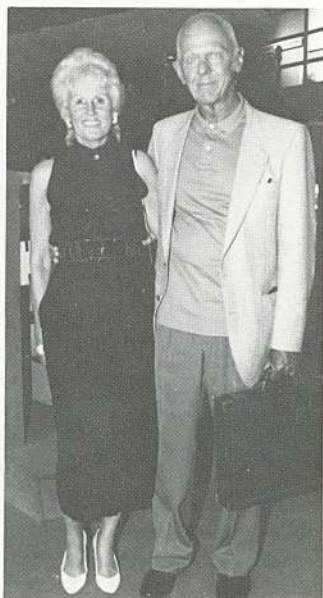
The evening's epilogue was given by Cliff Robertson who regaled the over 150 banquet attendees with humorous stories of his early days in films and on the stage. He closed with a reading from one of his writings, "It's Your 14th Summer," about his boyhood in LaJolla, CA.

It's a story about how he hustled and scrounged coupons from selling Liberty and Saturday Evening Post magazines toward getting a new bicycle... When he finally attained his goal, he pedaled miles twisting and turning over sunbaked California terrain to the local airport where he became an "airport rat." He worked eight hours a day for the prized moment when one of the pilots would say, "Okay kid, get your cushion and let's go."....And off they'd go, the 14 year-old, the pilot and a Taylor Cub for a 15 minute ride that Robertson thought made him the luckiest kid on the block.... "That's what I remember about the early days," he said.

An appropriate ending to a day that had been anticipated for five years....We did it!



Actor, writer, and sailplane pilot, Cliff Robertson with the Steuben Eagle Special Award he was given following the Expansion Dedication Banquet.



16th Annual Ralph S. Barnaby lecturer William S. Ivans and wife, Becky, LaJolla, CA.

AEROGAMI

Wouldn't you like to go back and relive those great moments when you were a kid in school and you five-folded a sheet of notebook paper into some kind of flying object and zinged over the head of the teacher or winged it at the class curve breaker?

Come out of the closet and join the rest of us on the flight line. The National Soaring Museum has a new program devoted to designing and building model gliders from paper, file cards, plastic straws, styrofoam trays or any other combination of lightweight throw-away material.

Aerogami is the craft (or maybe art) of making things that fly and derive their lift chiefly from aerodynamic forces...aerodynes, to purists.

Your designs can be as small as a microchip, or as large as your working space...whatever flies. Your glider can be so simple that it can be constructed while watching TV; or it can be so complicated that you would need a wind tunnel and a computer readout to verify your concept.

Aerogami is a development of the Japanese Origami, a traditional art of folding paper to form flowers, animal figures and other shapes. Only Aerogami is exponentially more expensive in that you use any lightweight material that you can find, and the finished device flies.

The program started a number of years ago as, "The Dynamics and Aerodynamics of Paper Gliders" and was designed by the NSM for children to make their own fold-and-cut paper gliders. The idea was to teach them the basics of flight. Many of these classes were held outdoors in area playgrounds and when the ground was damp, one paper plane landing turned a neat flying glider into a limp, formless spitball. Then with the changing rules of the 1985 "Second Great International Paper Plane Contest," (by the editors of Science '86 in conjunction with the Seattle Museum of Flight, ISBN 0-394-74305-9), to include other materials, the NSM decided to go one step farther and use anything the designer wishes.

Why should these neat little aerodynes be confined to 8 x 11 sheets of paper when so many other throwaway materials were available that were light and strong enough to be easily worked and flown?

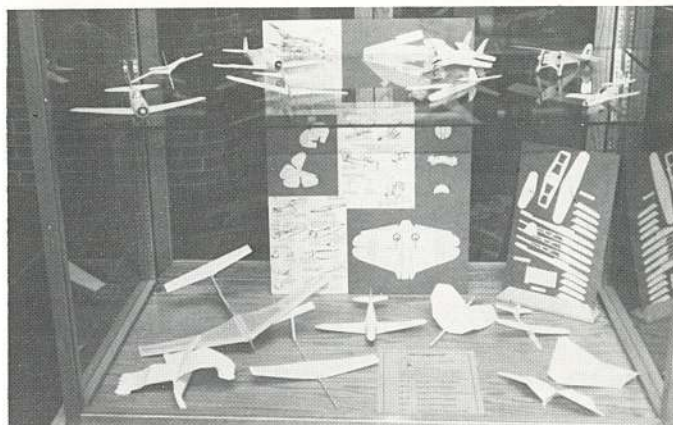
The first Aerogami class was held in 1988 and the results were encouraging enough to phase it into the NSM's Summer Cohesion Program.

At this point a little collateral reading might be recommended for those who earned their paper wings back in grammar school and need to be brought up to speed.

The following is a listing of publications on how to make things that fly:

Barnaby, Ralph S., Capt. U.S. Navy. "How To Make & Fly Paper Airplanes." Scholastic Book Services. 1968.

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A "how-to" NSM Aerogami display showing a variety of model gliders made from several different materials.



An NSM volunteer assists pint-sized aerodynamicists in constructing their models. (Photos by Milton Adams, Horseheads, NY)



Flight! Interplanetary travellers of the 21st century try their wings.

A Reminder.....

While the new National Soaring Museum Expansion was dedicated in September, you still have an opportunity to become part of one aspect of soaring history by having your own brick. It will be laser engraved with your name and cemented in our permanent wall display or, you may wish to be recognized on the special Diamond Plaque.

WALNUT BRICK	\$ 500	DIAMOND PLAQUE
W/SILVER EMBLEM	\$ 750	\$10,000
W/GOLD EMBLEM	\$1,000	\$5,000 \$2,500

The bricks are walnut, laser engraved, 2 1/4 x 5 3/4, with the donor's Name, City, and State. All levels of support are welcome and will be acknowledged. We will send engraved certificates for \$100 or more.

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NSM is a publication of the National Soaring Museum, Harris Hill, RD3, Elmira, New York 14903. Phone (607) 734-3128. 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 given.

Publisher — National Soaring Museum

Director — Shirley Sliwa

Editor — Bill Gallagher

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.

(continued from page 7)

Mander, Jerry; Dippel, George and Gossage, Howard, "The Great International Paper Airplane Book." Simon and Schuster, New York. 1967.

Science 86. Editors of. "The Paper Airplane Book-The Official Book of the Second Great International Paper Airplane Contest." 1985.

Vollheim, Peter. "30 Planes For the Paper Pilot." Pocket Books, New York.

Botermans, Jack. "Paper Flight." Holt, Rinehart and Winston, New York. 1983.

Garter, Michael. "Cut & Fold Paper Spaceships That Fly." Dover Pub., New York. 1980.

Kline, Richard. "The Ultimate Paper Airplane." Simon & Schuster, New York. 1985.

Bergan, Hans R. "The Lingore Paper Airplane Folding Manual." Lingore Press. 1981.

Weiss, Stephen. "Wings & Things." St. Martin's Press, New York. 1984.

Scholastic Book Services. Editors of. "The Funcraft Book of Flying Models." 1976.

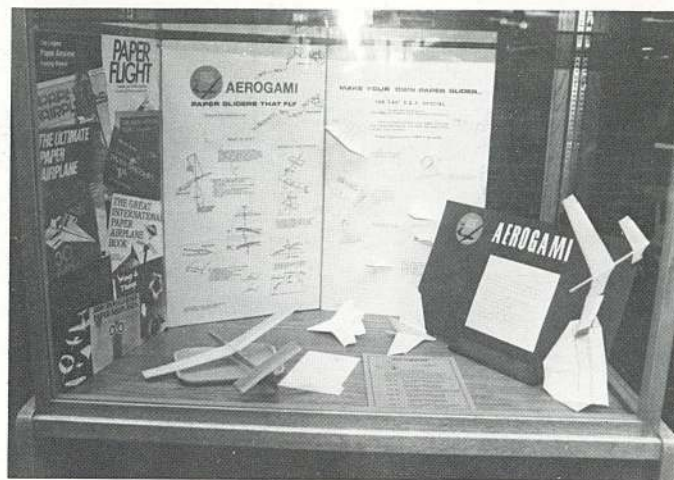
Bellerophon Books. Editors of. "Famous Fighters." 1978.

Marc, Arceneaux, Design & Illustrations by. "Paper Airplanes." Troubador Press, San Francisco. 1974.

Simon, Seymour. "The Paper Airplane Book." Puffin Books. 1971.

Most of these "how to's" can be obtained at book stores or your local library, probably in the children's section. But don't let that fool you; some of them are surprisingly sophisticated.

Remember the texts are only to get you started...The fun and challenge of Aerogami is to design and fly your own work. If you develop a ship that you're especially proud of, send your drawing in and it will be considered for publication in a future NSM Quarterly. Never mind that you're Dean of Students at a



Using index cards, or styrofoam trays, plastic straws, tape, a little aerodynamics and you're ready to fly!

prestigious Ivy University or that you're on the Board of AT&T or that you're a detective sergeant in the Bronx...If you want anonymity, we can oblige.

A word of advice: If you get stuck, you may want to check with a fourth grade son, daughter, niece or nephew. Some of the ideas they come up with may astonish you.

You can help in preserving our soaring heritage.

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

ON THE COVER

Top left, NSM President John C. Lincoln II, Paradise Valley, AZ, next, NSM Trustee and Chairman of the Expansion Steering Committee, Bernald S. Smith, Fremont, CA.

Center, NSM Expansion Ribbon Cutting, from left, Frank R. Gross, Akron, OH, Peter R. Daniel, Simpsonville, NC, William Schweizer, Elmira, NY, Walter H. Setz, Upper Darby, PA, John C. Lincoln II, Richard N. Hall Jr., Boulder, CO, Floyd J. Sweet, McLean, VA, Paul A. Schweizer, Elmira, NY, Mary Dwyer Flaspahler, Elmira, NY.

Bottom left to right, NSM Trustee and Honorary Chairman of the NSM Expansion Steering committee, Paul A. Schweizer, President of The Soaring Society of America, William C. Sproull, Bloomington, MN, New York State Assemblyman George H. Winner, New York State Senator John R. Kuhl.

1989 CALENDAR OF EVENTS

Date	Event	Location
Oct. 7, 8, 14, 15	Fall Foliage Weekends	Harris Hill/NSM
Oct. 14	4th Annual "Kitecitement" Kitefly	NSM/Harris Hill
Nov. 4, 5	Radio Control, Model Sailplane Competition	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