



# *Southwest Soaring*

Quarterly Newsletter of the U.S. Southwest Soaring Museum

A 501 (c)(3) tax-exempt organization

An affiliate of the Soaring Society of America, Inc.

**Spring 2009**

Model Sailplane Issue



**Jim Hoffer of Los Alamos, NM with the model glider he built**

## Board of Directors

### George Applebay, President

505 832-0755 (business)  
505 328-2019 (cell)

[gapplebay@aol.com](mailto:gapplebay@aol.com)

### Kathy Taylor, Secretary

505 672-0152

[kathytaylor1000@msn.com](mailto:kathytaylor1000@msn.com)

### Bob Leonard

[bbleon@flash.net](mailto:bbleon@flash.net)

505 281-9505

### J. D. Huss, Acting Treasurer

505 764-1221 (work)

505 899-9169 (home)

[jd.huss@faa.gov](mailto:jd.huss@faa.gov)

[abqtubbycat@earthlink.net](mailto:abqtubbycat@earthlink.net)

### Bob Alkov, Newsletter

505 281-7264 (home)

[prahna@aol.com](mailto:prahna@aol.com)

### Deor Jensen

480-258-3548 (cell)

[kdjensen@hotmail.com](mailto:kdjensen@hotmail.com)

### Jim Bobo, Honorary Board Member

[jimbobo@mindspring.com](mailto:jimbobo@mindspring.com)

### Webpage:

[www.swsoaringmuseum.org](http://www.swsoaringmuseum.org)

### Southwest Soaring Museum Foundation:

#### Allene Lindstrom, President

505 662-7510

### Bob Talarczyk, Foundation Liaison to the Board

505-424-7124

[roberttalarczyk@mac.com](mailto:roberttalarczyk@mac.com)

Cover: Jim Hoffer of Los Alamos, NM, is shown with the Akaflieg Braunschweig SB-7 model glider that he built and donated to the Museum for use in teaching groups about soaring flight. The model is large enough for a group to see and the controls can be moved by the instructor to illustrate their use in controlled flight. Jim has built several historically accurate flying models, including a 1/6-scale Grunau Baby III, a 1/5-scale Schweizer 1-23A, and his latest work in progress, an extensively researched 40%-scale 1929 Stamer-Lippisch primary glider.

## Annual Benefit Dinner

The USSSM will host a benefit dinner on Saturday, the 27<sup>th</sup> of June in the Route 66 building. A social hour will begin at 6PM followed by dinner at 7PM. At 8 we have tentively scheduled Bob Carlton who will speak on self-launching jet sailplanes. Tickets are \$50.00 per person. Casual dress is encouraged. The Museum will be open all day in conjunction with the 1-26 Nationals.

## 1-26 World Class Nationals

The 1-26 World Class Nationals will be held at the Moriarty Airport on June 23<sup>rd</sup> through July 2<sup>nd</sup> 2009. Practice days will start on June 21<sup>st</sup> and conclude on June 22<sup>nd</sup>. Contact Albuquerque Soaring Club president Bob Hudson at 505-507-6332. His email address is [Bhudson964@aol.com](mailto:Bhudson964@aol.com).

## Zuni Pow Wow

A Zuni Owner's Get-Together hosted by the Museum will be held at the Moriarty Airport the Third week of May 2009. Contact George Applebay for details on his cell phone 505 328-2019 or email him at [gapplebay@aol.com](mailto:gapplebay@aol.com).

## The Museum's Models

This months' issue is dedicated to the Model Sailplane builders and donors who have contributed so much to the museum. Four years ago we featured an article by Fernando Rueda who crafted over a hundred model replicas of historic sailplanes that are exhibited in a glass case in the museum. In addition we display an exhibit of World War II trainers and cargo gliders that Fernando built by hand. He also has fashioned a display of models of all of the Schweizer sailplanes for the museum. (We have models for sale in the gift shop).





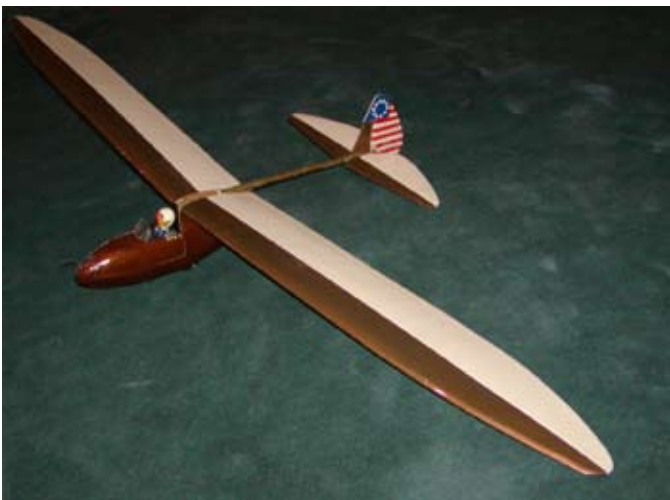
**Ruedas' Hawley Bowlus Collection**

A model of a Bowlus Baby Albatross (below) which was built by Bob Lorenzo of Bellingham, Washington in 1984, was donated to the museum by Bob in 2007. This large model has a 44 inch wingspan and 8 inch cord.



**Earl Nelson's Hand-Carved Models**

Lynn Buckingham also wrote a piece for the March 2005 issue of *Southwest Soaring* on Earl Nelson whose hand built models are featured in a glass case next to Fernando Ruedas' collection of WWII gliders.



**Bowlus Baby Albatross Model**



**The Large-Scale Applebay Zuni Model**

This photo taken by Shiela Mink depicts the model that was featured on the cover of *Southwest Soaring* in March 2005. It was built by Bill Loscomb of San Marcos, California.



**Rueda's Collection of Historic Gliders 1849-Today**



**This Model of a 304 was donated by Ted Grussing**





A beautiful detailed scale model of a jet powered HpH Glasflugel 304 Shark shown here was donated by Krěmář František of the Czech Republic.

### **Meet Our Volunteers-Frank Whiteley by Kathy Taylor**

Since 2005 Frank Whiteley has been the museum's webmaster. Frank grew up in Seattle, Washington (Boeing Town) where there was always something in the air. He remembers the first B-52 flying over his house, shaking everything. He was inspired by Karl Striedieck's long flight down the Allegheny Mountains as chronicled in a 1967 National Geographic.

Frank always wanted to fly but, being color blind, he knew he would never have a flying career. He participated in many other active sports: scuba diving, sailing, motorcycle racing, skiing, and building model airplanes and boats. His first glider ride was a demo at Seattle Sky Sports in 1974. The woman pilot kept him up for an hour in a L-13 Blanik and he was hooked. Shortly thereafter he joined the US Air Force and became a communications specialist. This provided a free ticket to RAF Mildenhall in England, where he quickly found the Essex and Suffolk Glider Club. He soloed on his 21<sup>st</sup> aerotow (the insurance company minimum) in a K-7. By 1978 he had completed two bronze flights in a K-13, a silver badge in a Ka-6B, and gold altitude in Scotland, including some cloud flying. He landed out 13 times trying for the 300K. He also joined the RAF Bister club where winch launches in the K-4 were available for \$1 per launch. He was sent back to the US in 1981 to Sacramento, California. While there he bought into a DG-100 and flew out of Calistoga, Truckee-Tahoe, Minden and Laguna Valley.

A five-year hiatus from soaring resulted from his next posting to Turkey with a new wife and two young children. Then he was sent back to England where he found 14 gliding clubs within a one-hour drive. He joined the Enstone Gliding Club and helped host the 1993 and 1994 British Open Class Nationals where he set up the satellite receivers that were used for some of the first GPS evaluations in BGA equipment.

Frank joined the SSA in 1980 while in England after he found that only British citizens were allowed to become full members of the BGA. After retiring from the Air Force in 1995, he settled in Colorado Springs and joined the Colorado Soaring Association, then moved with them to the Owl Canyon Gliderport, North of Fort Collins.

Frank has served as the SSA's Colorado State Governor, Chair of the SSA Governors and Record Keepers Committee and in 2003 became active in the Clubs and Chapters Committee. In 2006 he wrote a syllabus (job description) for SSA State Governors.

Along the way, Frank has owned all or part of several gliders, a Pirat, an SHK, a DG-100, and Open Cirrus (the one that George Moffat flew in the Sunship Game) and a Kestrel-19. He currently lives in Greeley, Colorado, where he operates a small business that provides Internet access, web hosting and web design services.

### **LATEST ACQUISITIONS:**

The Museum has recently acquired a research glider which was central to NASA's Apex Project. The following information on the project was downloaded from NASA's website on the internet.



**NASA's APEX PROJECT**

The APEX Project was designed to prove the feasibility of extended duration flight at altitudes near 100,000 ft. More information is needed about the aerodynamics of this previously unexplored flight regime if those aircraft are going to be successful.

Research into low Reynolds number, high subsonic Mach number aerodynamics had produced some promising, if somewhat limited, results. Some questions remained unanswered, and flight testing offered an attractive means of acquiring some of those answers. A preliminary design study was undertaken several years ago to find a satisfactory method for achieving trimmed flight at or near 100,000 feet altitude. The study identified several possible techniques which might have allowed an aircraft to achieve trimmed flight beginning between 95,000 and 100,000 feet (depending on the launch method used).

The objectives of the Apex project were to validate high-altitude airfoil design methodologies by measuring airfoil characteristics at low Reynolds numbers and high subsonic Mach numbers in a low turbulence (flight) environment and to establish a high-altitude test bed aircraft.

The APEX test vehicle was to have been a remotely piloted, highly modified commercial sailplane. It was to have been carried to an altitude of 100,000 feet by a high-altitude balloon, then be released vertically and maneuvered to achieve horizontal flight. Flight testing was to have been made at altitudes between 100,000 and 95,000 feet. The unpowered craft was intended to collect aerodynamic data down to an altitude of about 70,000ft and then glide to a landing at Edwards AFB. The wing had been designed to incorporate an airfoil suitable for low Reynolds number flight at high subsonic Mach numbers (less than 0.65 mach). A portion of the unswept/untapered wing was to have served as a test section. The wing instrumentation was designed to be imbedded during construction. The following measurements were to have been made to satisfy the stated objectives:

1. Measure boundary layer profiles at several locations streamwise.

2. Measure chordwise pressure distribution.
3. Measure boundary-layer state with hot-film anemometers.
4. Measure section drag with a fixed wake rake.
5. Measure freestream airdata information.

The experiment was to have used a PCM and telemetry system to send the signals to a ground-based recording system. Flight test maneuvers were planned to be limited duration push-overs to lower-than-trim angles of attack, and stabilized turns to achieve higher-than-trim angles of attack. Other maneuvers could have included constant alpha descents, constant  $q$  descents or constant Mach number descents.

Due to the extraordinary flight conditions that Apex was being designed for, there were several questions that came up on a regular basis. The project compiled a list of some of the most frequent questions and answers to them. The APEX program completed several parts of the airframe, but the effort was cancelled before they were assembled and flown.

(NASA Home Page Last Updated: July 10, 2008. Page Editor: Marty Curry)

## LARK



This beautiful kit built single-place Lark was donated by Gene Rinke who flies a LAK-17A out of Ionia Michigan. More on this aircraft in future newsletters.

## Aviation History – Charlie Brown’s Story

(We found this great story on the internet. We hear so many horrible stories about war and man’s inhumanity to his fellow man that this uplifting story offers some hope.)

Charlie Brown was a B-17 Flying Fortress pilot with 379<sup>th</sup> Bomber Group at Kimbolton, England. His B-17, named “Ye Olde Pub” was in a terrible state, having been hit by flak and fighters. The compass was damaged and they were flying deeper into enemy territory instead of home to Kimbolton. After flying over an enemy airfield, a German pilot named Franz Steigler was ordered to take off and shoot down the crippled B-17. When Franz got near the B-17, he could not believe his eyes. In his words, he “had never seen a plane in such a bad shape”. The tail and rear section was severely damaged, and the tail gunner wounded. The top gunner was splattered all over the top of the fuselage. The nose was smashed and there were holes everywhere. Despite having plenty of ammunition, Franz flew to the side of the B-17 and looked at Charlie Brown, the pilot. Brown was scared and struggling to control his damaged and blood-stained plane.

Aware that they had no idea where they were going, Franz waved at Charlie to turn back 180 degrees. Franz escorted and guided the stricken plane to and slightly over the North Sea towards England.

He then saluted Charlie Brown and turned back towards his home field. When Franz landed he told his CO that the plane had been shot down over the sea, and never told anyone the truth. Charlie Brown and the remains of his crew were told to never talk about it. More than 40 years later Charlie Brown wanted to find the Luftaffe pilot who had saved his crew. After years of research, Franz was found. Franz had never talked about the incident, not even at post-war reunions. They finally met in the US at a 379<sup>th</sup> Bomber Group reunion, together with 25 people who are alive now – all because Franz never fired his guns that day.

They found that Charlie Brown lived in Seattle and Franz Steigler had moved to Vancouver, B.C. after the war. When they finally met they discovered that they had lived less than 200 miles apart for the past 50 years! (This story checks out on Snopes with slight variations.)

## CURRENT MEMBERS

(Membership numbers and expiration dates are on your mailing labels)

### Individual Members

Michael J. Adams  
K.C. Alexander  
Robert Anderson  
Judy Applebay  
Al Backstrom  
Ken Barnard  
Ben Barrentine  
Colin Joseph Barry  
Ron Blum  
Roy Bourgeois  
Doris Bowen  
Robert Bruce  
William H. Chambers  
Henry M. Claybourn, Jr.  
Burt Compton  
Barry Crommelin  
Art Davis  
Don DeGasperi  
Charles Dobkins  
Leo Doyal  
Phil Ecklund  
Duane Eisenbeiss  
Earl Fain  
John Farris  
Don Fox  
Krémář František  
Floyd Fronius  
Jim Gaede  
Chip Garner  
Douglas Gray  
Gerard Gross  
Bill Hannahan  
Paul Hanson  
Charles Hayes  
Arthur Heavener  
Bill Rothlisberger  
Bertha M. Ryan  
Philip Schmalz  
Jan Scott  
Paul Searles  
Terry Slawinski  
Mike Smith  
Gary W. Sullivan  
Richard Sundquist  
Gene Tieman  
Leon Tracy  
Don Voss  
Scott White



1-23 Model Donated by Frauke Elber of the WSPA

## Family Members

Jan and Dan Armstrong  
Ken and Vi Arterburn  
Cara and Tom Brenza  
John and Jean Brittingham  
Dennis and Jane Brown  
Joe and Susan Blanks  
Bruce and Margee Carmichael  
David and Janice Carroll  
Gerald and Kathryn Cleaver  
David Fitzgerald  
William and Susana Fitzgerald  
Matt and Nicole Grunenwald  
Annita and Mario Harris  
Bill and Sophie Holbrook  
Francis Humblet  
Don and Diane Jackson  
Chris and Cynthia Kinnaman  
Richard and Mary Mah  
Curtis and Sue McNay  
Richard and Lisle Mockler  
Bill and Nancy Ordway  
Glenn and Georgia Overlander  
Stan and Carol Roeske  
Dick Seaman and Phyllis Wells  
Ed Slater  
Bob Stephens  
David and Meredith Stevenson  
Mike and Linda Stogner  
Robert Storck  
Doug, Susan, Brian & Danny Swain  
Pete and Judy Vredenburg  
Konrad Werner and Margaret Keller  
Mike and Marla Wersonick  
Frank and Rita Whiteley  
Rich and Patty Willson  
Roman Wrosz

## Supporting Members

Richard and Barbara Anderson  
Craig Angus  
Constance and Ernest Buenafe  
Bruce and Margee Carmichael  
Augie Chavez  
Ashton B. Collins  
Craig Denman  
Earl Fain  
John and Jo Margaret Farris  
Bob and Alice Gaines  
Tom Hardy  
Dave Harmony  
Fred and Magda Hefty  
Ken and James Jacobs  
Deor and Linda Jensen  
Richard and Jordi Kandarian  
Glenn Leonard  
Paul and Judith MacCready  
Mark and Neita Montague  
Charles E. Norman  
Angel Pala  
Rolf Peterson  
David Roth and Ann Morrison

Pete and Charlene Pankuch  
John and Joy Pierce  
Mr. and Mrs. A.G. Rogers  
Steve and Pat Schery  
Charles and Joann Shaw  
John and Patricia Sinclair  
Julie Smith  
Richard B. Strawn  
Robert Talarczyk  
Brian and Sandy Thomsom  
Brian and Sharon Utley  
Darrel and Maureen Watson  
Robert Williams  
Chris Wilson  
John Zimmerman and Leslie King

## Sustaining Members

Carl and Rhonda Ekdahl  
Frauke Elber  
Robert L. Hurni  
J.D. Huss  
Sergius and Katherine Kohudic  
Thomas and Judith McGuire  
Marilyn Meline  
Mark Minter

## Life Members

Bob and Christine Alkov  
Mike and Mary Anaya  
Toney and Elaine Anaya  
George Applebay  
John Applegate  
George Avent  
Betty Baker  
Bill Barber  
Karen Schreder Barbera  
Dieter Bibbig  
Terry and Shay Blankenship  
Jeffrey Bloch  
Jim and Suzy Bobo  
Taylor and Helen Boyer  
Ann Bratton  
Keith D. Brodhagen  
Phil and Susan Bucher  
Lynn and Allen Buckingham  
William M. Burge  
Jeff Byard  
Timothy Campbell  
Hank Caple  
Dean and Tammie Carswell  
Brian Cepac  
Shirley Crisp  
Mario and Linda Crosina  
Fred and Shirley Daams  
Jeanne Ebersole  
Warren Gaede  
Georgann and Jim Garver  
Carson Gilmer  
Gary C. Gilmer  
Ned Godshall and Ellen  
Torgrimson  
Lee Goettsche, Jr.

Sue Graham  
Ted Grussing  
Bruce Hansche and Chris Husted  
George B. Harrison  
Carl and Ann Hawk  
Barry J. Hicks  
Steve and Lilly Hill  
Bob and Carol Hoey  
Glenn Holforty  
Bob and Ruth Holliday  
Cliff & Lorraine Hoyle  
Al and Nancy Hume  
Ken and Michelle Jensen  
Ali ce Johnson  
James and Margaret Johnson  
Rim and Johanna Kaminskas  
Olin and Maile Kane  
Mike and Helen Kensrue  
Robert M. Knight  
George Lauman  
Al and Irene Leffler  
Barbara and Bob Leonard  
Glenn D. Leonard  
Steve Leonard  
Allene and Ivar Lindstrom  
Bill Liscomb  
Dieter and Suzanne Loeper  
Bob Lorenzo  
John T. Ludowitz  
Christopher Manley  
Jerry and Cindy Mercer  
John Mildon  
Arlen and Gerri Moore  
Robert Lee Moore  
Earl and Audrey Nelson  
Konrad and Johanna Nierich  
N.B. and Eloise Noland  
Paul Oldershaw  
Dan and Carolyn Palmer  
Neal and Miriam Palmquist  
Curtis Randell  
David and Jan Raspet  
Bill and Linda Patterson  
Neal and Karen Pfeiffer  
John V. Rawson  
Glen Reiboldt  
Dan Rihn  
Vaughn Roberts  
Renny and Joan Rozzoni  
Fernando and Alicia Rueda  
Lisa Ruppert  
Jim and Doris Sands  
Angie Schreder  
Jerzy Serafin  
JJ and Patricia Sinclair  
Bob Sparling  
Fred Taylor  
Kathy and George Taylor  
Mary Tebo  
Mike Tomazin  
Charles Turkle  
Tom Turkle  
Bob von Hellens  
Don Wallen

John and Sandra Whitelam  
Frank and Rita Whiteley

## Corporate Donors

EAA Chapter 179  
Vintage Sailplane Association  
1-26 Association  
Access Innovations, Albuquerque  
Lisa's Truck Center  
Sandia National Labs  
Distracted by Décor  
Mueller Buildings  
Sandia Corporation

## Directions to the Museum

We are located at 918 East Old Highway 66 in Moriarty. Traveling East on Interstate 40 from Albuquerque, exit at mile marker 197, 35 miles from the city. Traveling West on I-40 exit right at Exit 197. We are on the left as you enter route 66.

## Editors Note:

**The deadline for the summer issue is May 15<sup>th</sup>. If you have any ideas on improving the newsletter, I welcome your comments. A reader called my attention to several misspellings in the winter 2008 issue. To which I can only say "*Mea Culpa*". However, the article on the Oldershaw O-3 Renegade did not misspell the name. It appears in an article in the November 1981 edition of *Soaring* pages 34 and 39.**

**Please don't forget to renew your membership. Because of rising costs we can no longer afford to send the newsletter to delinquent members. If we haven't heard from you in a couple of years we will no longer be able to send you a copy of the newsletter.**

# USSSM Membership Application

Benefits of memberships include:

1. Free admission to museum facilities.
2. 10% discount on gift shop purchases.
3. Receive all USSSM mailings.
4. The satisfaction of knowing that you are helping to build a first-class museum.

Life members and major contributors and their minor children receive these benefits for life. Other members receive them for one year. Family, Supporting and Sustaining include minor children. Supporting and Sustaining accrue toward a Life membership.

Send check to: U.S. Southwest Soaring Museum  
P.O. Box 3626  
Moriarty, NM 87035

New \_\_\_\_\_ Renewal \_\_\_\_\_

Individual \_\_\_\_\_ \$35    Family \_\_\_\_\_ \$45    Student \_\_\_\_\_ \$20    Supporting \_\_\_\_\_ \$100    Sustaining \_\_\_\_\_ \$500  
Life Member \_\_\_\_\_ \$1,000    Major Contributor \_\_\_\_\_ \$\$\$\$\$

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone \_\_\_\_\_ E-mail Address \_\_\_\_\_

U.S. Southwest Soaring Museum  
P.O. Box 3626  
Moriarty, NM 87035

NONPROFIT  
ORGANIZATION  
U.S. POSTAGE PAID  
ALBUQUERQUE, NM  
PERMIT NO. 642

**RETURN SERVICE REQUESTED**