



A 501 (c)(3) tax-exempt organization An affiliate of the Soaring Society of America, Inc.

Winter 2007



SCHLEICHER ASW-15 N828E

## US Southwest Soaring Museum's Board of Directors

## George Applebay, President

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

gapplebay@aol.com

# Kathy Taylor, Secretary

505 672-0152 kathytaylor1000@msn.com

# Lynn Buckingham, Treasurer

505 298-1239 (home) 505 269-7822 (cell) lynnbuck2@msn.com

# Allene Lindstrom, USSSM Foundation President

505 662-7510

# **Bob Leonard**

bbleon@flash.net 505 281-9505

## J. D. Huss

505 764-1221 (work) 505 899-9169 (home) jd.huss@faa.gov abqtubbycat@earthlink.net

# Jim Bobo

jimbobo@mindspring.com

# **Bob Alkov, Newsletter**

505 281-7264 (home) prahna@aol.com

# **Deor Jenson**

480-258-3548 (Cell) kdjensen@hotmail.com

### www.swsoaringmuseum.org

Cover: Bill and Edna Burge and the Refugio Soaring Circle donated this ASW-15 to the Museum. (Ken Arterburn at the controls, see article on page 4.)

### Editorial By Bob Alkov

In this issue we reflect on the life of another of our benefactors who passed away in his sleep on August 28<sup>th</sup>. Paul MacCready was 81. Eric Mainic outlined his many accomplishments in a September 1st 2007 Los Angeles Times Obituary. Thanks to Pete Pankuch for the synopsis on page 5. Also included is a brief synopsis of an August 1950 Flying Magazine review of the then relatively new Schweizer 1-23 written by Paul MacCready.

We are pleased to announce the appointment of Deor Jenson to the Board of Directors. Deor is a retired pilot from the USAF where he held the rank of Lt Colonel. Deor, aresident of Edgewood, NM, and Arizona, received his BS in Industrial Technology from Southern Utah State College. He holds a commercial pilot's license with ASMEL and glider ratings. He is certificated as a flight instructor for airplanes, instruments and gliders. Deor volunteers as a docent in the museum. He is a welcome addition to our little group of volunteers.

Finally, we are indebted to Brian E. Cepac of Grand Prairie, Texas who donated a Schreder HP-11 to the Museum. George Applebay accepted it on behalf of the Museum in September.



George Applebay accepts the Schreder HP-11 from Brian E. Cepac of Grand Prairie, Texas

### Southwest Soaring Museum Foundation News By Allene Lindstrom

The Southwest Soaring Museum Foundation sponsored a benefit dinner at the main museum building on route 66 in Moriarty on September 8th, 2007. This was the first endeavor by the foundation to arrange a fund-raising dinner party. Our other objective was to offer thanks and public recognition to supporters of the US Southwest Soaring Museum. Certificates of recognition for services rendered were presented to many Museum supporters. As part of the weekend's "Land of Enchantment Fly-In" program, the EAA presented recognition awards to participants who helped with the fly-in.

A special event was the presentation of the FAA's prestigious Master Mechanic Award to George Applebay for his 50+ years as an unblemished A&P providing a generous service to the flying community. EAA Chapter 179, Don Gilmore, its President and J.D. Huss of the FAA (and USSSMBoard Member) worked feverishly to obtain the award in time to present it to George at the dinner.



JD Huss presents George Applebay with the FAA's prestigious Master Mechanic Award

We were very fortunate to have a well-known local aviator as our speaker. Ted Spitzmiller is a flight instructor and check pilot as well as the author of several published books related to alternate segments of aviation.. Ted's topic concerned the "Impact of Sputnik". His well received talk was entertaining and informative. Should anyone desire a copy of Ted's book on aeronautics, please ask and we will forward your request to Ted.

The citizens and merchants of Albuquerque, Moriarty, Los Alamos and Northern New Mexico deserve special recognition for their support of our benefit event. The following businesses donated merchandise as door prizes for diners to bid on. Our public THANK YOUs go to:

Aspen Copies, Brownell's Hallmark, Carlson's Creations, Cookin' In Style, First National Bank of Santa Fe, Metzger Do It Best, Village Arts and Los Alamos AvGas, Inc. all of Los Alamos.

We are pleased to acknowledge the following Moriarty businesses: El Comedor, Mike's Friendly Store, Inc., First Community Bank, The Furniture Barn, Home Town Sales and Lease, Holiday Inn, The Independent, and Sundance Aviation, Inc.,

Ortega's Weaving Shop of Chimayo and from New Jersey, Jason Molisani and KnitsByTeri.

From Albuquerque: Ted Spitzmiller, Great Harvest Bread, Joe E. Maloof and EAA Chapter 179.

### ARE YOU WILLING TO BID ON THESE ITEMS?

We had four valuable door prizes that did not receive bids, probably due to the late hour. Anyone wanting to bid, opening bid is \$25.00.

- 1. U.S. Series E \$100.00 Saving Bond
- 2. 15 gallons 100 Low Lead Aviation Fuel (LAM)
- 3. Decorated Pizza Serving Platter
- 4. "Fate Stalks the Pacific Sky" by Ted Spitzmiller
- 5. "Astronautics Book 2" by Ted Spitzmiller \$30.00 (autographed copy \$35.00)

Bid via email to ba1337853v@losalamos.com. Bids close April 30th, 2008.

The volunteers on Saturday came through with flying colors! Kathy Taylor and George Applebay took the responsibility of seeing that the Museum building was available and presentable. Bob Alkov did a superlative job of handling dinner tickets. Although Bob and Nancy Talarczyk are newcomers to Santa Fe, they agreed to help with the door prize table and make some new friends. EAA Chapter 179 assisted by bringing over the tables from the Land of Enchantment Fly-In at the Moriarty Airport. They even stayed late to help with the clean up and returned their tables and chairs to the airport. Even our guests were gracious enough to help with the clean up. To all who helped with the mundane jobs, MANY THANKS! We are so pleased everyone had an enjoyable evening!

Much of the success of the event was due to the dinner catered and served by the "El Comedor". They did an exceptional job. We were even able to serve beer with the dinner, eliciting positive comments from the diners. It was a success in many respects. We did not raise as much money for the Museum as we had hoped, but at least we didn't go in the 'red'. We learned many lessons.

Thank You All, Allene

### Recollections of ASW-15 N828E By Ken and Vi Arterburn

Now, with our favorite cross country machine resting in the U.S. Southwest Soaring Museum, we drive away without the ASW-15 and its long time trailer home. My life partner, Vi, (a great crew chief) and I have driven many a mile retrieving the old bird. Settling in for the long drive to South Texas, it is now time for recollections of those golden years of soaring.

With an air of nostalgia Vi said, "Ken do you remember the first time we towed Eager Beaver?" This was a nickname, affectionately given the ship, when the letters EB were assigned as contest letters. We had taken delivery of N828E in Oklahoma City, and towing her home was the trip she was referring to. As the miles unfolded, flight after flight was recalled. There was the 562 mile flight from the Texas Gulf Coast to a small grass strip near the Kansas border, north of Pawnee, Oklahoma. Two fishermen from a nearby lake signed

my landout form by headlight, (the ten and a half hour flight having ended at 8:15 PM). The fishermen took me two miles out to the highway to wait for Vi.

A state trooper pulled up where I was standing in the dark. I was dressed in white with a floppy white terry cloth hat. I was holding my barograph and a small flashlight, and I think he saw the small urine stain on my trousers. When I told him that I had flown from the Gulf Coast in a glider, he picked up his mike and asked the dispatcher if there were any reports of an escape from the local state home. I finally convinced the officer of my legitimacy by explaining the function of the barograph.

Meanwhile, as darkness came on, Vi found that the trailer lights were malfunctioning. Being a top crew chief with considerable electrical experience, she repaired the wiring and arrived only 40 minutes after I had landed. The next day as we trailered home, we passed through Ardmore, Oklahoma, not knowing that a year later, we would have a national goal record to that location. We had used the club's Lark on that flight. Hans Vandervlugt rode the back seat with me on the 408.9 mile trip. Vi and Han's wife Ruthie retrieved us, (that goal record still stands after 28 years).

Continuing the drive home from Moriarty, the reminiscing continued. As we entered the town of Artesia, NM we both recalled a land-out and retrieve that we had during the Nationals at Hobbs. Lawrence Wood had loaned us his 17 meter Kestrel. The task was Hobbs to Ft. Sumner to Artesia and back to Hobbs. The day had gone sour over rough terrain on the last leg. I turned back and landed in a cultivated field East of Artesia by the Pecos River. A pilot flying adjacent to me continued on. He was seriously injured and his ship destroyed when he went down.

After spending the night at Carlsbad, Vi and I continued the trip homeward. We were quiet for a while, then Vi said, "how about the trip to Wheeler?" The trip to Wheeler is a two part story, beginning with a 1000 kilometer goal attempt. On July 25<sup>th</sup>, 1981 Marion Griffith and I declared Liberal, Kansas as goal flights. Marion was flying his 604 and I was flying our ASW-15 (Eager Beaver). In a nut shell, Marion completed the flight, claiming the National Open Class to a Goal record. 4 I landed 510 miles out at Shamrock, Texas. Since I was talking to him when he landed, I passed the information on to his wife in her retrieve vehicle.

Five days later I realized the weather was holding on that flight path, so I took a tow to 5000 feet on top of a low cloud street and released over the Arkansas River Bridge, some 15 miles south of our airport. I slid back under the street almost over the airport. The lift was good so I headed out toward my declared goal. This time more realistically, Wheeler, Texas in the panhandle, 532.59 miles away. The flight went so well I considered going on to Dodge City, Kansas. I was flying along a cloud street at 8000 feet and watching the shadow on the ground. It went as far as I could see, but suddenly I ran off the end of the street and into stable air. The shadow on the ground continued on.

I wondered how this could be. Then I glanced to the west and saw a high street of Cirrus whose shadow lined up with the cloud street shadow. After determining that the lift was indeed gone, I turned and glided due west for 20 miles to the Wheeler airport. (That record stood for over 15 years). Eager Beaver had served me well and provided Vi with another 1000 mile retrieve. In addition to the above flight, we have enjoyed many 300 and 400 mile flights in good old Eager Beaver.

Bill Burge purchased Eager Beaver from the Refugio Soaring Circle and put 1200 fun hours on it before giving it back to the club and joining the club in donating it to the museum. We all wish to thank George Applebay and his associates at the Museum for preserving this part of our soaring history. I will leave it to other club members to submit their recollections of Eager Beaver.

Kenneth H. Arterburn



### Dr. Paul B. MacCready 1925 - 2007

Paul B. MacCready, an awesomely accomplished inventor studied circling hawks and vultures to figure out how to realize the loftiest dream of Leonardo da Vinci - inventing a human powered flying machine.

Dr. MacCready seemed a genuine free spirit. A friend noted his "innocent sense of wonder" in a Time magazine interview "empowered by a quirky, darting intellect". His fascination with aerodynamics came from watching butterflies and moths as a boy, and his dreams for the future included animal-powered flight. "You can do all kinds of things if you just plunge ahead," he said in an interview with Science in 1986. "It doesn't mean you're any good at them, but you can be good enough."

He believed that daydreaming was his most productive activity. Practical results mattered little to him, although many of his breakthroughs found practical expression. He liked to point to Charles Lindbergh, whose Spirit of St. Louis hangs near his own flying machine in the Smithsonian. He said Lindbergh's TransAtlantic flight did not advance aircraft design, but catalyzed thinking about aviation. "I'm more interested in a world that works than what sells", Dr. MacCready said in an interview with Popular Science in 2003. "We make strange devices that do more with less."

Dr. MacCready soared to international notice in 1977 when his Gossamer Condor made the first sustained flight by human power. Two years later, his Gossamer Albatross crossed the English Channel. The company he founded, AeroVironment, then turned to aircraft using photovoltaic cells to harness the sun's power; the Gossamer Penguin made the first solar-powered climbing flight in 1980. In 1981, the Solar Challenger flew 163 miles from France to England at an altitude of 11,000 feet. Dr. MacCready and his team of young engineering zealots also invented a solar-powered car called the Sunraycer, which won a 1,867mile race across Australia against 22 other solarpowered cars in 1987. Three years later they worked with General Motors to develop the electric-car prototype 5 that led to the EVI.

Others of Dr. MacCready's creations included tiny robotic planes used for military reconnaissance; power sources to keep atmospheric-monitoring devices aloft indefinitely; and an 18 foot, eerily realistic, flying dinosaur for an Imax movie. In 1980, Dr. MacCready was named Engineer of the Century by the American Society of Mechanical Engineers.

Paul Beattie MacCready was born on Sept. 29, 1925, in New Haven, Connecticut where his father was a physician and his mother a nurse. He was dyslexic and had trouble concentrating, but showed a passion for things that interested him. "His interest in butterflies was trying to figure out how to build one", Discover magazine said in 2002. He marshaled his gift for building odd model flying machines to win a national contest at 15. "Anybody who's not interested in model airplanes must have a screw loose someplace," he said in an interview with The San Diego Union-Tribune in 1992. He studied mechanical engineering at Yale, taught flying in the Navy, then returned to Yale and switched his major to physics. He became enraptured with the sport of soaring, setting an altitude record, capturing three national titles and becoming the first American to win the international championship in 1956. He invented the MacCready speed ring, an instrument still used by glider pilots to select the best flight speed between thermals.

After earning his doctorate from the California Institute of Technology, Dr. MacCready started his own company in the field of weather modification. He was the first to use small, instrumented aircraft to study storm interiors, design News said in 1999. In 1971 he started AeroVironment to pursue projects in alternative energy, the environment and aviation.

In 1976, when Dr. MacCready was \$100,000 in debt after acting as co-signer for a bad loan, he heard about a prize being offered by Henry Kremer, a British industrialist, for the first human powered flight. Converted from pounds, it was just what he needed. His epiphany came on a crosscountry trip with his family. He watched a hawk, then a vulture. He realized that if he could increase the wingspan of a plane without increasing it's weight, a superbly conditioned bicyclist could pedal fast enough to elevate and move the aircraft forward. Dr. MacCready assembled the plane from piano wire, aluminum tubes, bicycle parts, mylar film and a propeller. He borrowed from the Wright brothers to solve the turning problems that had bedeviled competitors by adding a lever so the pilot could twist the inside wingtip as he rounded a corner.

For all his inventiveness, Dr. MacCready considered technology a mixed blessing, telling Design News that he was "and ambivalent Luddite." He advocated unbridled

thought. "There is a value to some way-out impractical projects that are done for prizes, symbolism or the fun of it, where you don't have to worry about production," he said in an interview with the New York Times in 1990. "You can focus on extremes; when you do that you're able to go beyond the prescribed limits to new frontiers."

(Excerpted from the Los Angeles Times Obituary by Eric Mainic, August 31<sup>st</sup>, 2007)

Schweizer 1-23 Review by Paul MacCready

In the April 1950 issue of Flying Magazine, the then 24 year-old Paul MacCready reviewed the Schweizer 1-23, first introduced in 1948 at the National Soaring Contest as an all aluminum sailplane except for the trailing edges, ailerons and tail surfaces. It incorporated a single main wheel and tailwheel. With spoilers, it sold for a modest \$2,195 in 1950. Paul wrote that for only \$245 more you could have the option of flush riveting and for another \$200 Schweizer would add a deluxe filled and rubbed two-tone lacquer finish. At the time of the revue only 6 had been built.

Paul noted that the ship had an empty weight of 358 pounds and a 25:1 glide ratio. With an aspect ratio of 13, the 44 foot wing had a design load factor of 8.34. Minimum sink was 2.3 ft/sec at 36 mph at a gross weight of 545 pounds. Stall speed was 33 mph. With a design speed of 123 mph, placard was at 110 mph.

Paul rhapsodized about the roomy cockpit and handling characteristics of the 1-23 especially during aerobatics. The only sour note that he encountered was the lack of rudder authority. He complained about the lack of sufficient directional control. He said, "The 1-23 did not yield coordinated turns with maximum rolling, even when full rudder was used (adverse yaw was too strong). I could not control direction in a stall with rudder. And the slow rolls and snap rolls that I tried never came out properly. But these are unimportant details..." He went on to say "I've never flown a sailplane yet that had all the rudder control that I wanted..." All in all though he was quite pleased with the 1-23.

<u>Membership numbers and</u> <u>expiration dates are on your</u> <u>mailing labels</u>.

### CURRENT MEMBERS Individual Members

Michael J. Adams K.C. Alexander **Robert Anderson** Judy Applebay **Al Backstrom** Ken Barnard **Ron Blum Doris Bowen** William H. Chambers Henry M. Claybourn, Jr. **Burt Compton** Art Davis **Don DeGasperi Charles Dobkins** Leo Doval **Duane Eisenbeiss Earl Fain John Farris** Don Fox **Flovd Fronius** Jim Gaede **Chip Garner Douglas** Gray **Gerard Gross Bill Hannahan Paul Hanson Charles Hayes** Arthur Heavener Jack Hickman **Bill Hill** William J. Huckell **Bob Hudson** Hal Hudson **Fred Jensen** LaFonda Kinnaman **Mary Lattimore Chuck Lauritsen Steve Leonard Bill Lumley** Jim Marske **Don Neeper** David Ochsner Steve Otto **Peter Pankuch** Daan Parè **H.H. Patterson** John Prodan **Rav Proennekke Robert W. Randall Bill Read Bill Rothlisberger** Bertha M. Ryan **Philip Schmalz** Jan Scott **Paul Searles Terry Slawinski Mike Smith** Gary W. Sullivan **Gerry Taylor** Gene Tieman Leon Tracy Barry van Wickevoort Crommelin **Rick Weber** Scott White

#### **Family Members**

Jan and Dan Armstrong Ken and Vi Arterburn John and Jean Brittingham **Dennis and Jane Brown David and Janice Carroll** Gerald and Kathryn Cleaver Art and LaVerne Eiffert William and Susana Fitzgerald **Annita and Mario Harris Bill and Sophie Holbrook** Don and Diane Jackson Chris and Cynthea Kinnaman **Richard and Mary Mah** Susan and Tim McAllister **Ed and Karen McNabb** Curtis and Sue NcNay **Richard and Lisle Mockler Bill and Nancy Ordway Glenn and Georgia Overlander** Stan and Carol Roeske Ken Scarbrough **Bob Stephens** Mike and Linda Stogner Doug, Susan, Brian & Danny Swain Brian and Sharon Utley Pete and Judy Vredenburg **Konrad Werner and Margaret** Keller **Mike and Marla Wersonick** Frank and Rita Whitelev **Rich and Patty Willson** 

### Supporting Members

**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** Fred and Magda Hefty **Ken and James Jacobs** Deor and Linda Jensen **Richard and Jordi Kandarian** Paul and Judith MacCready Mark and Neita Montague **Charles E. Norman** Angel Pala **Rolf Peterson David Roth and Ann Morrison** John and Joy Pierce Mr. and Mrs. A.G. Rogers **Richard Seaman and Phyllis** Wells **Charles and Joann Shaw** John and Patricia Sinclair **Julie Smith Richard B. Strawn Brian and Sandy Thomsom Richard A. Vollmer Darrel and Maureen Watson Robert Williams Chris Wilson** 

### **Sustaining Members**

Taylor and Helen Boyer Carl and Rhonda Ekdahl Frauke Elber Glenn Holforty 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 Anava** George Applebay John Applegate George Avent Betty Baker **Bill Barber Dieter Bibbig** Terry and Shay Blankenship Jeffrev Bloch Jim and Suzy Bobo **Ann Bratton** Keith D. Brodhagen Lynn and Allen Buckingham William M. Burge Jeff Byard **Timothy Campbell** Hank Caple **Dean and Tammie Carswell Shirley Crisp** Mario and Linda Crosina 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 Mr. and Mrs. Robert O. Hausner **Carl and Ann Hawk Barry J. Hicks** Steve and Lilly Hill **Bob and Carol Hoey Bob and Ruth Holliday Cliff & Lorraine Hoyle** Al and Nancy Hume Ken and Michelle Jensen **Dick and Alice 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** 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 **Don Santee** Alcide Santilli 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 SW Soaring Museum Foundation

#### NOTE

If you have written an article or letter to the editor that you would like to have published in this newsletter. DEADLINE FOR COPY FOR THE SPRING ISSUE IS FEBRUARY 1ST, 2008.

#### DIRECTIONS TO THE MUSEUM

The U.S. Southwest Soaring Museum is located at 918 East Old Route 66 in Moriarty, New Mexico. Traveling East from Albuquerque on Interstate 40 take exit 197 (35 miles from the city). Exit right onto Highway 66 facing West. We are the big building on the left.

Traveling West on I-40 exit right at Exit 197 and continue heading West on Route 66. We are the big building on the left.

# **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 Life Member	_\$35 Family\$45 Student\$20 Supporting\$100 Sustaining\$500\$1,000 Major Contributor\$\$\$\$
Name	
Address	
Telephone	E-mail Address

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

## **RETURN SERVICE REQUESTED**

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