

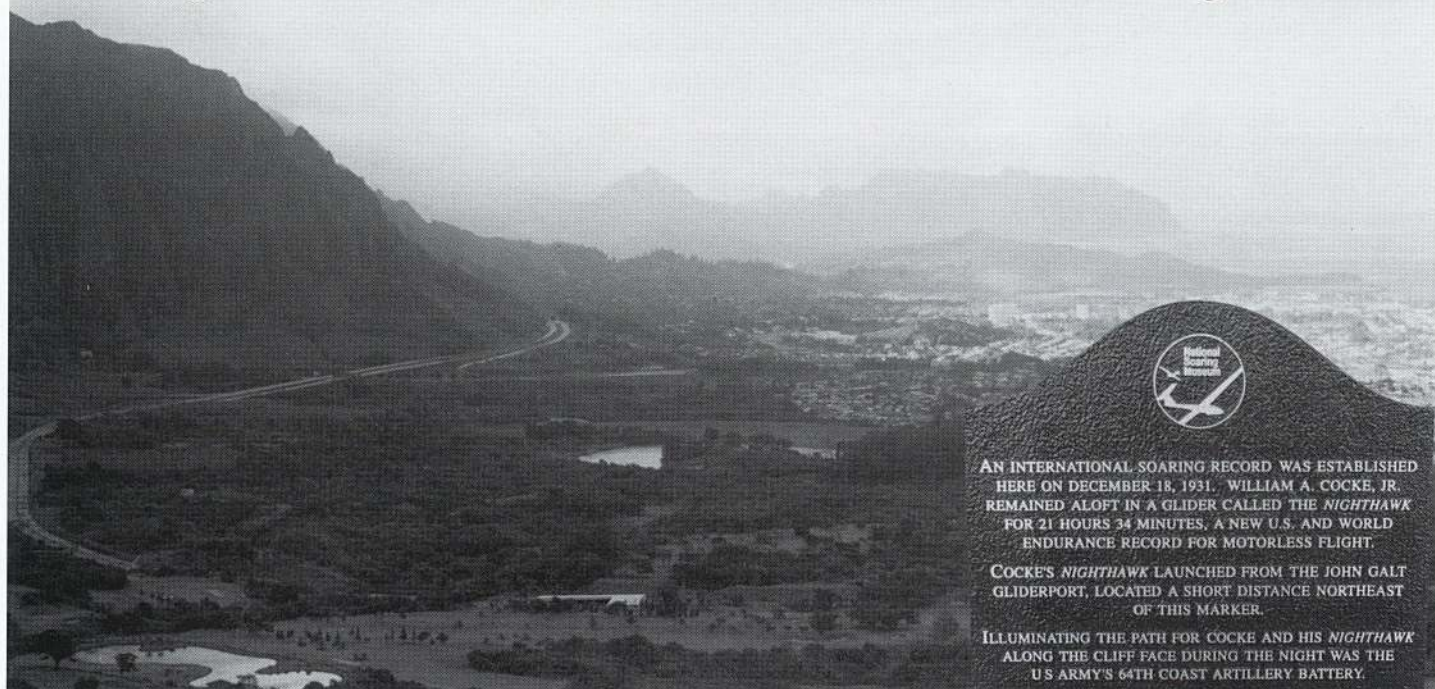
A black and white aerial photograph of a patchwork landscape, likely a rural area with fields and roads. Two aircraft are visible in the sky: a larger, light-colored plane in the upper left and a smaller, darker plane in the center. The sky is filled with large, dramatic clouds.

NSM

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The Ninth U.S. Landmark of Soaring Nu'uanu Pali State Park, O'ahu, Hawaii

The Flight of Lieut. William A. Cocke, Jr. in the "Nighthawk"



View from Hawaii's Nu'uanu Pali State Park where Lieut. William Cocke and his "Nighthawk" set an international duration record of 21 hours and 34 minutes.

1931-- The United States and the world were at the nadir of a desolate spiral of depression. Overriding this numbing shock, the buoyancy and enterprise of those who took to the skyways prevailed.

That year Wiley Post and Harold Gatty broke the 'round the world record in a Lockheed Vega; Clyde Pangborn and Hugh Herndon dropped the undercarriage of their Ballanca and flew non-stop across the Pacific (1). Speed, distance and altitude records were broken with regularity, and a new and accessible air sport was gaining popularity....soaring.

At that time, most of the soaring activity blossomed in Europe and the United States mainland. Yet, it was off O'ahu's serrated cliffs, in what was then the Territory of Hawaii, that one of that era's most under-reported yet sensational world record soaring duration flights occurred on December 17 and 18, 1931.

Shortly before 3 p.m. on the 17th, U.S. Army Air Corps Lieut. William A. Cocke, Jr. strapped into his "Nighthawk" sailplane and 21 hours and 34 minutes later soared into aviation history.

Sixty-five years later, last December 8, The National Soaring Museum dedicated the Ninth National Landmark of Soaring commemorative plaque at historic Nu'unani Pali State Park, just north of Honolulu. The bronze marker, sponsored by the Hawaiian soaring community, recalls Lieut. Cocke's trail-blazing flight.

The Nu'unani Pali site is very rich in Hawaiian history, and to many, this locale is considered sacred. It was here that possibly thousands of warriors were driven off the high cliffs to their deaths by King Kamehameha the Great, in a war that resulted in the unification of various islands and petty fiefdoms into the nation of Hawaii, in the early part of the last century.

The following account of Lieut. Cocke's flight is based on aero-

Right: The NSM's Ninth U.S. Landmark of Soaring Plaque. (NSM Staff Photos)

AN INTERNATIONAL SOARING RECORD WAS ESTABLISHED HERE ON DECEMBER 18, 1931. WILLIAM A. COCKE, JR. REMAINED ALOFT IN A GLIDER CALLED THE NIGHTHAWK FOR 21 HOURS 34 MINUTES, A NEW U.S. AND WORLD ENDURANCE RECORD FOR MOTORLESS FLIGHT.

COCKE'S NIGHTHAWK LAUNCHED FROM THE JOHN GALT GLIDERPORT, LOCATED A SHORT DISTANCE NORTHEAST OF THIS MARKER.

ILLUMINATING THE PATH FOR COCKE AND HIS NIGHTHAWK ALONG THE CLIFF FACE DURING THE NIGHT WAS THE U.S. ARMY'S 64TH COAST ARTILLERY BATTERY.

THIS MARKER IS DEDICATED TO THE PEOPLE OF HAWAII WHO HELPED MAKE THIS FLIGHT POSSIBLE, AND TO THE THOUSANDS OF GLIDER PILOTS INSPIRED BY THIS FEAT.

ERECTED DECEMBER 1996

THE NATIONAL SOARING MUSEUM
HARRIS HILL, ELMIRA, NEW YORK
AN AFFILIATE OF THE SOARING SOCIETY OF AMERICA

historian and Vintage Sailplane Association archivist, Raul Blacksten's superbly detailed two-part copyrighted article that appeared in the November and December 1991 issues of *Soaring* magazine:

Everyone heralded Hawaii's first National Aeronautic Association (NAA) sponsored national glider contest as a trail-blazing event. The Contest Committee envisioned glider pilots from all over the world coming to O'ahu's John Galt Gliderport November 22, 1931, and rewriting the record book. Honolulu newspapers hyped the event with episodic stories of gliders and their pilots.

The thinking was that if sailplaners stayed airborne long enough, established distance, endurance and possibly speed, records would fall domino-style. Although the U.S. altitude mark stood at 3,130 feet (Martin Schempp), optimists predicted that record could be broken on the blustery crags of O'ahu.

Then it began to rain.

The stormy weather broke somewhat, but the field was still so soggy that crushed coral was laid out on the runway to provide a dry and supportive surface for the day's launch.

Monday was flyable but barographs had not arrived from the mainland and launches were postponed until afternoon. Texas Wing, U.S. Army Air Corps Reservist 2nd Lieut. William J. Scott, in his new "van Bezel Albatross," was first off. Another Texas Reservist, 2nd Lieut. William A. Cocke, attached to the 19th Pursuit Squadron at Wheeler Field, O'ahu, was scheduled next, but

never launched. Cocke's ship, "Nighthawk," bore a startling resemblance to the famous Bowlus "Albatross Model SP-1, No. 16," the so-called "Paper-Wing," (2) although Cocke maintained that he built "Nighthawk" himself, with the assistance of other airmen at Hawaii's Wheeler Field.

Blacksten comments: "The confusion is compounded by the fact that the actual "Paper Wing" was sold to a company in Los Angeles and disappeared at about the same time that Cocke is supposed to have built his glider." Blacksten mentioned that this was not the first outing for Cocke and "Nighthawk." On July 20th Cocke flew the 11-day-old glider to a Hawaiian endurance record of 3 hours and 55 minutes. The unofficial World Endurance record was broken by Lieut. Crain less than a week later with a wind, rain,

long and chilly stay aloft, with sandwiches, coffee, winter flying gear and woolen longjohns. Wife Frances scoured the Islands for the woolies. Not readily available in a tropical paradise like Hawaii, she finally had them flown in.

Searchlights for nighttime ridge-running along the treacherous Pali were provided by the Army's 64th Coast Artillery Battery, with the whole Ft. Schafter Battery at the ready, as a field exercise.

Honolulu newspapers named Lt. Scott as the man to beat, owing to his previous flight. Hundreds lined the familiar ridge to witness what all expected to be a world record flight.

A half-hour after Cocke took off, Scott started his roll-out. Still on tow, as his "van Bezel Albatross" became airborne, Scott lost his rudder. Unable to release, a wing ripped off and the glider went



and darkness-shrouded flight of 16 hours and 38 minutes.

The next ship off was described as a two-place "cabin glider" from Luke Field. Piloted by Lieuts. Thompson and Lathrop, it was touted by newspapers to be the largest glider in the world. The soaring giant was demolished in a towing accident before it ever flew. Both pilots survived, shaken but unhurt.

The Contest Committee disqualified the Honolulu Glider Club's Bowlus "Albatross," the only civilian entrant, because they felt that its covering could not withstand the turbulent conditions expected at the Nu'unani Pali.

On the second day Scott turned in a 6-hour, 34 minute flight, at an average 23-25 miles per hour--not quite good enough for record-breaking, but indicative of what was possible.

For the next 23 days it rained, and service personnel returned to their military commitments. After all, they were in Hawaii to train, not to joust with fickle Polynesian winds in ships that their superiors thought of as being aerodynamically marginal.

By December 17, 1931 (28 years to the day after Orville Wright made the world's first powered, controlled flight) the rain had subsided and the bouyant trade winds began to work their magic. Cocke was first on the line, followed by Lieut. Scott and, last, Edward Peacock, in the Honolulu Glider Club's re-covered "Albatross."

The contest gliders were equipped with different colored navigation lights for night time identification; "Nighthawk's" was red and white.

The ship's only instrumentation was an altimeter. Cocke later told reporters that his wind screen had come loose and continuously bumped his head. Although he wound up with an aching head, he said that the loosened windscreen acted as an air speed indicator because he could estimate how fast "Nighthawk" was traveling by the variation in the pressure on his head.

Cocke launched shortly before 3:00 p.m., provisioned for a

"Nighthawk" at the base of Nu'uuanu Pali, probably Galt Field, Oct. 1931. Note open access points for wing mounting. (NSM Archive Photo)

Right, Lieut. William A. Cocke around 1930. (From "Nighthawk", November 1991 Soaring)



into a slow, sickening spin, hitting nose first. Scott was taken to Kaneohe hospital where he died a short time later. Edward Peacock, in the Hawaiian Glider Club "Albatross," decided not to fly.

Blacksten writes, "Witnessing this event from 3,400 feet, Cocke became concerned about this friend and finally dropped a note asking about him. Contest officials decided that it would be best not to

Continued on Page 4

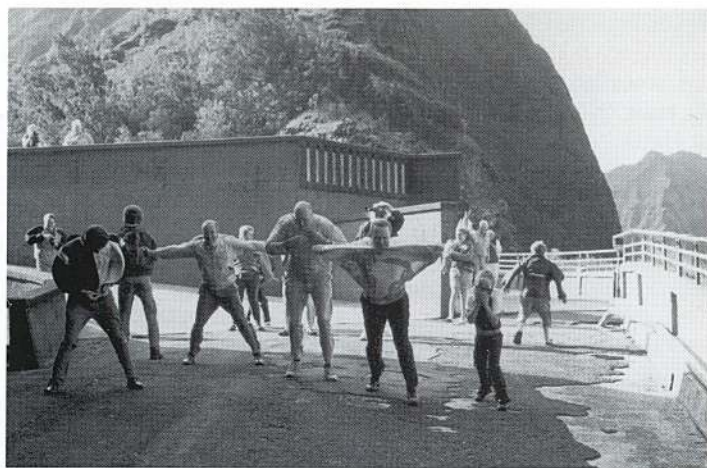


Left to right: Davidson Luehring, Chair of Implementation Committee; (unidentified); Simine Short, Chair NSM Soaring Landmark Committee; Jeffery Byard, NSM President. (NSM Staff Photo)



Left, 2nd Lieut. William A. Cocke, ready for flight. (From "Museum of Flying", *Soaring*, January 1991.

Right, Some of those present at the unveiling of the Ninth U.S. Landmark of Soaring, demonstrate the strength of the gusty winds off Nu'uanu Pali State Park. (Mai Scott Photo)



tell Cocke about his friend's death... They laid out a fiery message in gasoline-soaked tape, 'Scott OK,' but he had been dead for several hours."

By 5:07 the next morning, Cocke had covered more than an estimated 350 miles and had broken the previous World Endurance Record of 14 hours and 7 minutes set by Ferdinand Schultz in 1927. Two and one-half hours later, he had broken his friend Crain's 16 hour and 38 minute flight set July 25-26.

The goal had been 24 hours, but the following afternoon Cocke became apprehensive. The steady trade winds weakened and Cocke landed "Nighthawk" at 12:34 p.m., 21 hours and 34 minutes after take-off. A new World Endurance Record had been set. On learning of his friend's death, he said that from what he saw, he was neither surprised nor shocked.

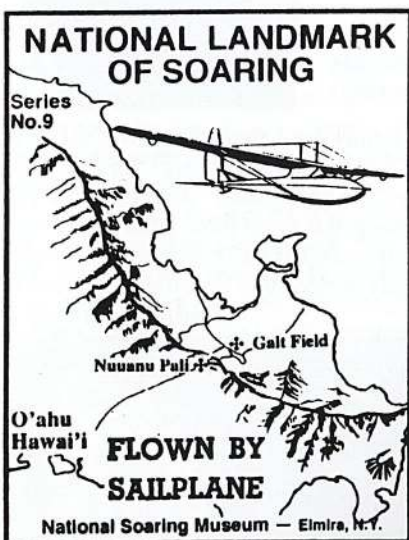
Cocke's barograph recorded an altitude of 3,454 feet, just shy 176 feet of the old American record of 3,630 feet.

The NAA estimated that Cocke had flown 450 miles, well be-

yond the World Distance Record, but it wasn't in one direction, or out-and-return. There were no out-and-return records in 1931, only straight line and closed course. His was over a closed two and one-half mile course. Consequently, the distance segment of Cocke's flight was not recognized by either the NAA or the FAI (Federation Aeronautique Internationale).

In his two-part series, Blacksten points out that Cocke's flight was bettered a year and a half later and that enduro-flights eventually stretched to beyond 50 hours, but "Nighthawk" still holds the American record. It was not surpassed until after the endurance record category was abandoned as being too dangerous.

Cocke and his Hawaiian-born wife returned to California where he went to work for Douglas Aircraft. While Cocke attended glider meets in Long Beach, CA and even had started to build another ship in Downey, CA, he never made any further record flights. As WW II approached, Cocke rejoined the Air Corps. In May 1941, he, along with aircrews of the 19th Bombardment Group (H) GHQ, ferried B-17s to Hawaii, then in October on to Clark Field in the



Left, illustration from special First Day Mail Cover showing route flown by Lieut. Cocke and "Nighthawk" December 18, 1931.



Lieut. William Scott in the cockpit of the "van Bezel Albatross," Lieut. William Cocke, right Lieut. Thompson. (NSM Archive Photo)

Philippines. He was awarded the Distinguished Flying Cross and Air Medal for his part in these trans-Pacific flights.

On December 8, 1941 (Dec. 7, Pearl Harbor time) Lieut. William A. Cocke was killed. The aircraft which he helped bring to defend the Philippines were completely destroyed on the ground by the first wave of Japanese attackers.

In his "Nighthawk" story, Blacksten says that the record-breaking ship was on display at the Los Angeles County Museum of Natural History until the mid-forties (2).

- (1) *Aviation: The Pioneer Years*, by Ben Mackworth-Præd, Chartwell Books, Inc. P 269
- (2) See following article

Right, Alfred Smith (recently deceased) was official N.A.A. (National Aeronautics Association) contest observer. (NSM Staff Photo)



"Nighthawk" and the Bowlus Albatross "Model SP-1 The Paper Wing"



Top: The restored "Nighthawk" at the Santa Monica Museum of Flying. **Inset:** Detail of the "Nighthawk" cockpit, showing its sparse instrumentation. **Left:** Left side of "Nighthawk's" fuselage showing records and details of its flight career. (All photos from John Ludowitz's "Museum of Flying" article in the January 1991 *Soaring* magazine.)

In April, 1990, "Nighthawk" was re-discovered in a downtown Los Angeles warehouse by volunteers from the Santa Monica Museum of Flying. After some touching up and patching, the historic ship was put on exhibit at the Santa Monica facility for six months through an arrangement with the Los Angeles County Museum of Natural History. The restoration of Cocke's ship is described in a story in the January 1991 issue of *Soaring*, "Museum of Flying," by John Ludowitz.

Richard H. Benbough, aero-historian, writer, and volunteer at the San Diego Air and Space Museum, is a recognized authority on William Hawley Bowlus, his gliders, sailplanes and construction techniques.

In a recent phone conversation Benbough said, "It appears that the paper wing of the SP-1, #16 was mated to the fuselage of the Bowlus SP-D, #17 by a private owner, then sold to a scrap metal company. At that point it disappeared. I have that bill of sale, although I can't imagine what a scrap metal company would want with a wooden glider."

He added that he didn't believe that Cocke would have had enough time to complete an entire ship.

Although there is no proof, Benbough suggested that Cocke may have adapted and reworked parts from both the Bowlus #16 and #17. "After all," Benbough said, "there were two other Bowlus sailplanes at the Hawaiian event, and there were 15 serials up to the SP-1, Serial #16, so-called "Paper Wing." Bowlus Model SP-D, #17, and Model 'A', and Serial #18 through Serial #23, were almost identical, varying mostly in wingspan. Sometimes a production run of half dozen ships were built in some serial categories. So there were many other Bowlus ships available that Cocke could have copied or taken parts from." (1)

Observers point out similarities between Cocke's ship and the Bowlus "Paper Wing." The wing's center section was built inte-

grally with the fuselage. Ribs in the outer wing panels were made by cutting a web of heavy craft paper and gluing wooden cap strips on either side. Every third rib was a compression rib with diagonal compression members on each side of the web. (2) These ribs were then attached to truss-type wing spars. The wings' leading edges were of thin plywood. Of all his designs, Bowlus only used this wing rib design on the SP-1, Serial #16, the so-called "Paper Wing."

Benbough pointed out another anomaly: Bowlus taped over the Model SP-16's outer wing panel and 10-foot ailerons, and added wing-tip ailerons. In a paper, "Bowlus Glider Designs" in the National Soaring Museum's archives, Richard Benbough wrote that Bowlus's 17th glider, Model SP-D, was the first to be manufactured by the Bowlus Sailplane Company factory at Lindbergh Field, San Diego, CA. It was the prototype for the standard production models to follow.

Blacksten calls attention to how the two gliders differ. "Nighthawk" was fitted with king posts, and had wire bracing atop and under the wings. "According to Cocke's published writings, this may be because he wanted strengthened wings due to the strong conditions found at the Nu'uuanu Pali on windward O'ahu." Blacksten adds that there are also some further cosmetic and internal structural differences.

Museum of Natural History of Los Angeles still owns "Nighthawk" which is on exhibit at the Santa Monica Museum of Flying in California.

(1) Raul Blacksten, who kindly checked these articles for accuracy wrote, "I have a letter from a man who says that, as a kid, he saw Cocke build the glider out of a bunch of little parts. Who really knows? Everyone involved, as far as I have been able to find, is dead (I have not been able to find Crain at all.) The man who I have the letter from says that he was too young and could not swear one way or the other."

(2) "The Bowlus Paper Wing Albatross - America's First Sailplane" by Richard H. Benbough, *Bungee Cord*, Spring, 1993.

R/C Soaring Symposium

May 3, 1997 at the National Soaring Museum



R/C conversation among attendees at the symposium luncheon at the NSM's Edward A. Mooers Community Room. (NSM Staff Photos)



Welcome and Introduction of Speakers
Paul A. Schweizer (left)
 Chairman NSM Exhibit & Long Range Planning Committees



"ARRL Report On loan of the Skyrider and contemporaneous radio equipment"
Alvin Battison (left)

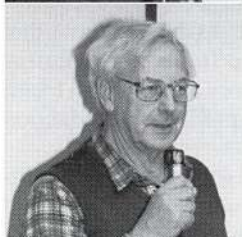


W. Bill Thompson (left)

"Harner Selvidge's Report on his contacts with Ross Hull and the Skyrider"
 read by W. E. Gallagher (not pictured)



"FAI Records for R/C Soaring Models History & Status"
Maynard Hill (left)



"Aspects of Scale Documentation"
Martin Simons (left)

Program co-ordinated by John Derstine, Harris Hill L/D Radio Control Glider Club.

"Condensed History of R/C Soaring The Skyrider, Windfree and Skyhawk"
Gary Fogel (right)



"Condensed History of SSA and Soaring"
 W.E. Gallagher (not pictured)



"Interesting Differences Between R/C Models and Full Scale Sailplanes"
Larry Fogel (right)



"Areas Where Full-Scale Soaring and R/C Soaring Can Cooperate"
Larry Sanderson
 Soaring Society of America - Executive Director (right)



Paul A. and William Schweizer (left and center) with Maynard Hill holding "Pegasus" by Jack D. Hiner, a three world record winner for R/C gliders.

ON THE COVER - "CROSS COUNTRY"

"Cross Country," an oil painting by Ann Welch is now in the National Soaring Museum's collection. Ms. Welch is recognized world-wide as being one of the outstanding women pioneering soaring pilots. She also enjoys an international reputation as an aviation author. Ms. Welch is less well-known for her popular artistic work.

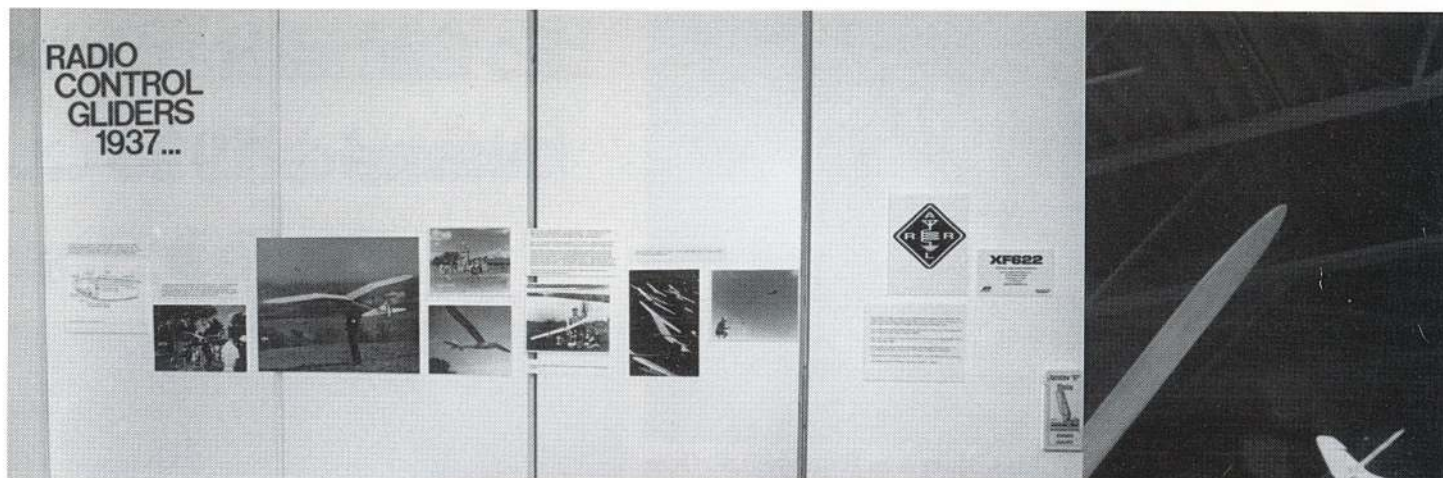
"Cross-Country's" aerial perspective and the almost Cezanne-like rendering of the landscape takes viewers into that timeless and expansive realm where sailplanes live.

Dr. Sam Huddleston, who donated the work to the NSM, had this picture exhibited in his Johnson City, Tennessee home. "I get a joyous feeling from it," he said. Dr. Huddleston was team physician for the 1965 United States Soaring Team. He became acquainted with Ann Welch, who was contest director for the 10th

World Championships at South Cerney, England at an R.A.F. training base, about 100 miles west of London.

"It attracted me, and I bought it," the team physician said. He added "It's typical English countryside, likely Surrey. The sailplanes are probably an 'Olympic Standard' and a 'Skylark'."

Ms. Welch, O.B.E., A.F.R.AeS., F.R.Met.S., received her pilot's license in 1934, and during WWII ferried Wellington bombers and other aircraft, some without radios, in all weather. She started gliding in 1937 and managed the British Team at the World Soaring Championships between 1948 and 1968 and was WSC director in 1965. In addition to being a sailplane instructor, writer, and lecturer, she is a sailor, grandmother, and was vice president of the Gliding Commission of the Federation Aeronautique Internationale.



NSM's photo panels showing R/C and ARRL advancements since 1937. (NSM Staff Photos)

60 Years of Radio Control Sailplane Modeling On Exhibit

On Harris Hill during the 1937, 8th U.S. Soaring Contest, a radio controlled glider, built by Carl W. Thompson, Jr., and H.M. Plummer, made several successful flights. It was shown on the cover of *OST* magazine of Oct. 1937. Unfortunately it later suffered an ill-fated launching.

The parts were purchased by Ross Hull and R.B. Beame.

Named "Skyrider," it was equipped with a smaller and more efficient radio receiver and direct current motors for on-board controls. It flew at the 1938, 9th U.S. Soaring National. "Skyrider" still carries a note from that event; "R.C.S.P. No. 2 - Finder please notify Ross H. Hull, Mark Twain Hotel, Elmira, New York."

The exhibit was made possible through the efforts of John Derstine, the American Radio Relay League (Newington, CT), Horizon Hobby, Champaign, IL, Gary Fogel, Los Angeles, CA, and Ed Slegers, Slegers International, Waston, WI.



Above center: The 16 ft. wingspread 1937 R/C "Skyrider" in soaring configuration in the NSM's main exhibit hall. Below left: 1929 vintage Amateur Radio High Powered Self Excited Transmitter w/RCA UV-204A, for 250 watts (designed by Ross Hull, American Radio Relay League.) Below right: NSM visitors' hands-on, modern JR, 6 channel, multi-data display system, and R/C sailplane simulator kiosk.



Mrs. Laurie Herold, Carl E. Herold, Mrs. Mary Lou Hammond, E. Gene Hammond and Bernald Smith at the 1996 U.S. Soaring Hall of Fame induction ceremonies.

E. Gene Hammond, Minooka, IL, and Carl E. Herold, Reno, NV, were honored at a reception and banquet during the United States Soaring Hall of Fame Ceremonies, May 7, 1997, at the National Soaring Museum.

Preceding the induction, NSM Director James W. Swinnich presented the Sixth Annual Gross Sky Ghost Achievement Award to Penn State student, Mark Elliot Glauner of University Park, PA.

The Hugh H. Whitney Memorial Scholarship was awarded to Elizabeth Schwenkler, of Elmira, NY, a student at Corning Community College. She will represent the United States at the European Junior Soaring Championships to be held August 11-22 this year at Freudenstadt, Germany.

NSM president Jeffrey Byard, Atascadero, CA, introduced SSA Executive Director Larry Sanderson, Hobbs, NM, who reminded attendees of the long commitment to soaring of the 1996 inductees.

Hammond and Herold, both past presidents of the Soaring Society of America, joined 97 other American Hall of Famers who have been selected over the past 43 years for "achievements in a noteworthy manner in soaring, or who have made noteworthy contributions to the sport of soaring."

The Hall of Fame was started in 1954 by the Helms Foundation of Los Angeles, CA. The Foundation determined that soaring was a sport of such national stature that its outstanding participants should be recognized. In 1975 the Soaring Society of America transferred the United States Hall of Fame to the National Soaring Museum.

Sanderson presented E. Gene Hammond, saying, "Gene and I have been closely associated for a long time. When we started working together, I was not married. I did not have my three children. I did not have my two grandchildren, and I certainly did not have bifocals." He said that probably the most precious com-

NSM Executive Director James W. Swinnich congratulates Whitney Memorial Scholarship winner Elizabeth Schwenkler of Elmira, NY.



E. Gene Hammond and Carl E. Herold Named 1996 Inductees to the United States Soaring Hall of Fame



U.S. Soaring Hall of Famers welcome the 1996 inductees. Seated left to right: Carl E. Herold, E. Gene Hammond. Standing, William Schweizer (1984), Hal M. Lattimore (1989), Virginia M. (Ginny) Schweizer (1971), Bernald S. Smith (1984), Floyd J. Sweet (1963), Edgar Seymour (1995) and Paul A. Schweizer (1955). (NSM Staff Photos)

modity, even beyond money, is time; and it's something that we don't have very large amounts of. "People like Gene, who are willing to give it are special people. They're irreplaceable."

Hammond, a retired United Airlines pilot, was introduced to soaring by another United pilot, Neal Ridenour, in 1969. Since then Gene has flown almost 3,000 hours in about 20 different types of sailplanes, and has owned seven ships, including three ASW-20's. He has flown in several local, regional and national contests, "usually finishing on the first page," he quipped. Hammond was champion in Regions 6 and 7 and completed his Diamond Badge in 1974.

The new Hall of Famer served on the Board of Directors of the Chicago Glider Club, chaired the 1979 SSA Convention in Chicago, was twice elected SSA president, and still serves as Region 9 Director.

In 1980, he chaired the SSA Flight Training and Safety Board. He remained in that position during the FTSB merger with the SSA's Soaring Safety Foundation, which he and four other SSA Directors founded.

In 1983 Hammond became the SSA delegate to the OSTIV (Organization Scientifique et Technique Internationale du Vol a Voile) Training and Safety Panel, an assembly of chief flight in-

structors from 19 countries. He has recently assumed the position of SSA's delegate to the International Gliding Commission, the organization representing gliding at the FAI (Federation Aviation Internationale).

Hammond actively served as an NSM trustee 1988-1996. He has received the SSA's Certificate of Appreciation, Exceptional Service Award, and the SSA's highest recognition, The Warren E. Eaton award. Hammond has also received a Certificate of honor from the National Aviation Association for his work in glider safety.

Hammond recalled that in 1969 he and Ridenour, an active soaring pilot, were returning from Washington, DC, after a United Airlines proficiency check. The cockpit talk shifted to soaring, which resulted later in Hammond's taking a couple of rides in a Schweizer 2-22, then another couple hops in a Schweizer 1-26.

"Somebody kind of set a hook in me," he said, "and I've never been able to get out of these things since."

He said that his first recollection of gliders was when he was about 12 years old and saw this odd-looking box sitting out behind a building at Western Illinois College. It turned out to be the forward section of a wartime Waco CG-4A cargo glider, with the control column still in place. "I flew it many hours," he laughed, "and succeeded in every mission; never crashed once."

NSM President Jeffrey G. Byard welcomed Hall of Fame members and attendees to the induction ceremonies.



He described his eight-hour Diamond Distance flight as being in the right place, at the right time, with the right ship. "I started out in a rush, climbing to over 5,000 feet over an oil refinery and heading out on course. I thought, this is going to be the day." Fifteen minutes later Hammond was down to 800 feet in absolutely still air, about 20 miles from home, looking for a place to land. Then, he said, he stumbled into a couple of bubbles of lift and worked his way over to a haze just forming. "And those of you who have done this before know exactly what happened. The next thing I know, I'm at 7,000 or 8,000 feet heading on course."

Eight hours later he had completed his Diamond Badge distance requirement. "Just a matter of being at the right place at the right time," he said.

His first ship was an HP-11. "Thank you Dick Schreder, wherever you are," he quipped. "Fantastic machine... 17 years of dynamite... just run it for all it's worth. It won't bend." He paid particular homage to wife, Mary Lou, "She's probably still got the bruises on her arms from the wing-tips of the HP-11."

Then he had a Libelle for five years. "And then the second generation of fiberglass came along," he said. "After suffering through a Mosquito for about five years, I decided to try an ASW-20." He said he had seen them "flapping through me in thermals. Every time they would hit a thermal their wings would bend and they'd gain another 50 feet on me. God, I gotta have one of these." He is now on his third ASW-20.

Two-time Regional winner Hammond, who has flown in several regional and national contests recalled when the scoring and typing were done by hand. A couple of pages were needed to list the finishing positions. And the real goal was for us amateurs to finish on the first page."

Hammond mentioned the comraderie that exists among the directors of the SSA and the NSM. "It's really nice to work with people who are interested, who can take an idea, develop it and see it work."

Hammond said the thing he is most proud of is the development of the National Soaring Safety Foundation. In 1983, then SSA president Hal Lattimore called a meeting of a group he called the Soaring Safety Task Force. Their objective was to determine why there were so many fatalities and what could be

(Continued on Page 10)

Left, Jaye Fish, NSM Director of Development/PR, Carl E. Herold, 1996 Hall of Fame inductee, and Linn M. Buell, NSM Trustee.



"It's really nice to work with people who are interested, who can take an idea, develop it, and see it work," 1996 U.S. Soaring Hall of Fame Inductee, E. Gene Hammond said.

(Continued from Page 9)

done about it. This evolved into the present Soaring Safety Foundation, an affiliate of the SSA. The original members were Hammond as chairman, along with Paul A. Schweitzer, Bernald Smith, Judy Lincoln, and Bob Driscoll.

"In 1981, when I first started keeping records, we had somewhere between 60 and 70 reported accidents per year, and 12 or 13 fatalities," Hammond said. "It was horrible." The goal was to cut the accident rate in half and to reduce the fatalities to zero. The accident rate was reduced 50 per cent several times since 1982, to around 30-35 accidents per year. The fatality rate is averaging three or four annually, and in 1993 there were none.

"Trustees serving on the Soaring Safety Foundation would like to feel that these reductions are the direct result of work put forward by this group," Hammond said, adding, "The Foundation is alive and well and continuing to do what we originally planned."

He laughed and said, "Larry has told practically everything I've done in soaring, so I won't go into the bad stuff." He added that he accepted his induction to the United States Soaring Hall of Fame with pride and a lot of humility. "I look forward to continuing this process of working for the Soaring Society of America and the National Soaring Museum, and hope you will do the same. Thank you very much."

Bernald S. Smith said, introducing the next 1996 Hall of Famer, Carl D. Herold, Reno, NV, "It must have been fate; Carl was born on June 3rd, 1932, just a few months after the founding of the Soaring Society of America." He added that Carl grew up in rural Ohio, just a few pylons away from the sounds and sights of world-renowned Cleveland National Air Races, from 1936 until that competition ended.

Ironically, Herold demonstrated glider flight at the first Reno, NV, Air Race.

Carl Herold is an aerospace systems engineering scientist who began power flying in Columbus, OH. He currently holds a commercial single engine-land (SEL) and commercial glider rating with an Instrument Flight Rules (IFR) endorsement. In 42 years he has flown 30 types of aircraft, 48 gliders and 9 motorgliders. He has flown the

Soaring Society of America Executive Director Larry Sanderson congratulates 1996 U.S. Soaring Hall of Fame inductee E. Gene Hammond.



equivalent of 7.9 times around the world.

Herold has been strongly supportive of the developing Sports Class and for the last 34 years has been working on the CH Sailplane Sports Class handicap system. He has published numerous papers on the subject, two for the Federation Aeronautique Internationale (FAI). He began writing "Herold's Hearsay" for the PASCO's *Westwind* in 1969. This column was also picked up in *Soaring*, 1970-1980.

Herold was awarded the prestigious Warren E. Eaton Memorial trophy in 1984 and the SSA Exceptional Achievement Award in 1990. He founded the annual PASCO Minden, NV, wave camp 29 years ago and conducted over 65 high-altitude flying and oxygen seminars during that period. He has logged over 300 hours flying gliders cross-country above 25,000 feet and has exceeded 43,000 feet.

Carl Herold delivered his Hall of Fame acceptance in a somewhat different manner than most of his predecessors. In his slide presentation he graphically dramatized the present state of soaring and the nature of the pilots who soar with the following outline:

- Soaring Playground
- Long Flights
- Soaring Distance Roadmap
- SSA Membership
- Badges and Growth Rates
- Region 11 Tow History
- Racing Growth
- Sailplane Census
- Handicapping Insights
- Other Trees I Helped Plant
- Educational Activities
- Changing Compass
- Our Sport
- Our Industry



1996 U.S. Soaring Hall of Fame inductee Carl E. Herold demonstrated with a series of slides a statistical analysis of the present state of soaring and pilots who soar in the United States.

These Charts and graphs included:

- Market Changes
- Sailplane Census Over The Years
- 1993 Glider Census by State
- Seeding Listing by Class-1970 through 1994
- 1992 Pilot Ranking by Class
- 1993 SSA Seeding list by Class
- 1993 FAA Glider Census (Percent Manufacturers for 4,886 Gliders)
- SSA Seeding List Overview-1992, '93, '94 Trend
- Last Year Number of Gliders Relicensed-Total Known Fleet - 5,144
- Glider (FAA Records Cut-off Data: 31 January 1995)
- Ten Longest Flight Average (1970-1994)
- SSA Student Membership Fraction
- SSA Special Interest Groups-1991
- WDA Poll - Age Distribution (389 CFGI [Certified Flight Instructor Glider] Responses)
- US FAI Badges Per Year
- 1993 Pilot Best Class Participation-541 SSA Seeded Pilots

Seeding by Classes -1970 through 1995
 1993 SSA Seeding List Breakdown by Class
 Region 11 Tow History, Traffic Movements
 Sailplane Census Over the Years (Current Annuals, C. D. Herold Analyzed FAA Data)
 Estimates of Glider Installed Electronics
 1993 Estimates of Gliders, Installed Electronics and Current Value
 Estimated Soaring Industry Expenses-\$1,000,000,000 for 1994 (Percentages and dollars)
 1993 FAA Glider Census-Percent Manufacturers for 4,886 Gliders
 1993 FAA Census Estimates Manufacturers Distribution
 1993 Glider Avionics Estimate
 1991 WSC, Uvalde, TX-Open-15 Meter
 1991 WSC Tasking Averages by Class-Task-Dist-Speed
 Sailplane Census Over the Years
 Glider Performance Complexity and Expense Trend
 Sailplane Sales Trend

Increased cost

80% of imported gliders have engines

Gliderport access diminishing

Much increased competition for discretionary time

Diminishing Home-Built sales market

Market for older gliders diminishing

Increasing expense of gliders and equipment

-provides more profit for seller

-provides an increased income for repair, maintenance, avionics, storage & tie down

-activities

Market potential: 400 per year glider sales to a population size of 200,000 (.00005%)

Herold closed with a challenging graphic:

What is the best strategy for SSA? Strategies suggested were: 'Recognize what has worked over time.' 'Keep all ongoing processes working.' 'Recognize, and develop productive volunteers...' 'Preserve strategies that have gotten us this far--Winning, Partially Successful, Self preservation.' 'We will have to accept coming changes--Culture, Economics, Training, Education, and Skill Levels.' 'We need to increase profit motive.' 'We need to continue to work within the system for preserving soaring special interest groups.'

1996 U.S. Soaring Hall of Fame inductee Carl E. Herold being congratulated by SSA Executive Director Larry Sanderson.



After his presentation, Herold was surrounded by banquet attendees who wanted more information on the broad spectrum of soaring facts and figures that he presented. (Editor's note: Carl Herold generously donated his United States Soaring Hall of Fame presentation to the National Soaring Museum where it is available to those interested. Please specify titles desired, address, and other particulars.)

From the NSM Director

"A good museum attracts, entertains, arouses curiosity, leads to questioning and thus promotes learning. It is an educational institution that is set up and kept in motion..."

So said John Cotton Dana (founder of the Newark Museum) in 1909, back when museums in this country were in their infancy. This standard remains. The NSM is confronted in this regard by both international and nationwide constituencies and local audiences. In addition, our programs must engage the soaring community and a culturally diverse general public with little, or no, understanding of motorless flight. The challenge presented by this myriad of audiences, each with their own knowledge base, expectations and needs, is most evident on the exhibit floor.

A quick critique of the current exhibition area reveals two significant flaws. First, the displays are disjointed. The subject matter is relevant enough, but there are no scientific or historical connections made for the visitor. If you are a member of the soaring community, you bring a framework of experience and intellect to your visit here. Your previous learning allows you to place a particular display within an existing context. You probably are even aware of vital issues left unaddressed. If this is your first exposure to motorless flight, the exhibits might not answer critical questions about soaring.

The second flaw is lack of a traffic pattern or flow through the exhibit spaces. This contributes to any perplexity people may have



James W. Swinnich

regarding what stories the museum is trying to tell or what lessons we are attempting to teach. People feel frustrated by "trying to make sense of it all."

A concise comprehensive exhibition addressing the history of soaring in a scientific and technological continuum is critical to providing the visitor with a basis of understanding other exhibits and programs.

Exactly what objects should be placed on display to tell the story, what is the story, what subject matter should be incorporated, what type of design principles utilized, what communications technologies implemented and what type of traffic pattern will be conducive to learning and use space effectively? All these questions are up for debate.

What we do know is that the exhibition area is really the "first face" audiences usually see of museum interpretation and programming. It is here that judgment begins. Exhibits, too, are the primary vehicles to showcase the object collection. These are the basics, the known. What the NSM will do in the near future is answer the questions posed above, do some self assessment of the exhibits program, and evaluate what our various constituencies need and want from the museum. For example, the exhibit should reflect the cultural diversity represented in both the origins of motorless flight and our audiences. Of equal importance is modern soaring, including what is taking place at soaring clubs, in competition, and with the vintage sailplanes aloft.

What we have planned for the future is this comprehensive exhibition meant to attract, entertain, arouse curiosity, questioning and promote learning as Mr. Dana professed doing so many years ago.

Overview of U.S. Flying Wings and Tailless Gliders Exhibit



At top: NSM '97-98 Exhibit Focus, Designer and Builder photo panels.

Above: Left to right, auto-launched Marske "Monarch E" (on loan from Jim Marske) background, self-launched "Mitchell U-2" (NSM Collection); foreground, conventionally launched, Backstrom "Flying Plank" (NSM Collection); overhead, Trampenau "Sensor 610F" hang glider (on loan from Robert Trampenau.) (NSM Staff Photos)

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

Our awareness of these unique aircraft is highlighted by these representative ships and photo descriptions of designer-builders Al Backstrom, Jim Marske and Don Mitchell, three of America's foremost exponents of the Flying Wing.

Any comprehensive treatment of flying wings must include hang gliders, with their tailless designs and blurred lines between soaring, hang gliding, ultralights, and parafoils. On the technological cutting edge, the "Sensor 610F" hang glider is on loan from Robert T. Trampenau.

24th Annual Ralph S. Barnaby Lecture Delivered in O'ahu, Hawaii by Ted Bellak and Herman Steglmeier



Herman Stiglmeier (NSM Staff Photo)

gan in a sailplane. Byard added that many of the things that Bellak did in his long career in aviation are in Bellak's book, *Memories of Gliding and Soaring*.

With an impish glint in his eye, octogenarian Bellak, moving slowly to the speaker's rostrum, said, "I'm caught between second childhood and eternity, and I'm using everything I can in between." But with a wave of the hand and a few phrases, he had his audience transported back to the times of Lindbergh and Wiley Post.

He said that he stood in awe of Capt. Barnaby, "courageous, a brilliant engineer, a visionary who earned the No. 1 glider pilot certificate. This man was what we say in Hawaiian, 'Naa maya puna'...the right stuff."

Bellak remembered going out to the Newark Airport to see Frank "Speed" Hawk's modified Franklin PS-2 glider, the Texaco "Eaglet," and to New York's Floyd Bennett Field to see round-the-world flier Wiley Post land his Lockheed, "Winnie Mae."

"It started with models when I was quite young," he said. "And for some strange reason, I seemed to be a very successful contestant." He spoke of a model airplane speed event held over a measured course in New York's Van Cortland Park. "When my turn came up, I whipped out a board that I rigged double-barreled rockets to, lit it, and won the contest. Unfortunately, it exploded right after passing the finish line, and there were screams from the field next door where the New York mayor was giving a speech and he went prone right away. He thought someone was shooting at him. Anyway, I was disqualified because they had nothing in the rules allowing the use of rockets."

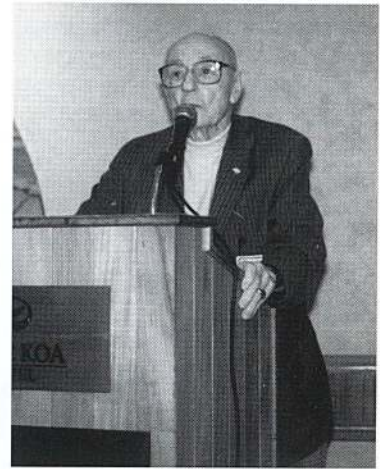
Through his models, Bellak learned about thermals. "I would fiddle and stall around with my rubber-powered models as the starter prodded me on. I was waiting for the breeze to die down. I knew there would be a thermal coming over the edge of the field. Then, I would launch; up she'd go, out of sight. Again I won and was sent to the Detroit Nationals."

Bellak spoke of the old days when glider plans were available in magazines, even pulps. "Kids were building these things, teaching themselves how to fly, and clobbering themselves.... Regulations were practically nil, so far as the C.A.A. (Civil Air Authority) was concerned. Now, all that has changed."

Two trail-blazing airmen regaled their audience with stories and anecdotes of their experiences in the formative days of soaring at the National Soaring Museum's 24th Annual Ralph Stanton Barnaby Lecture. The lectures by Ted Bellak and Herman Steglmeier, both now living in Hawaii, were held for the first time outside the continental United States at the Hale Koa Hotel on the island of O'ahu, December 1996.

Inaugurated in 1973 by the National Soaring Museum, the annual lecture recalls historic and noteworthy achievements in motorless flight. Delivered by outstanding personalities in the field, the lecture series was named for the late Capt. Ralph Stanton Barnaby, USN. Many of Capt. Barnaby's accomplishments were remembered by Bellak, the first speaker.

Introducing Bellak, NSM President Jeffrey Byard said that Ted worked in a German glider factory, was at the German Wasserkuppe, and in 1939, flew across Lake Michi-



Ted Bellak (NSM Staff Photo)
(Other photos from his book "*Memories of Gliding and Soaring*.")

He said from then on an influx of university-educated engineers built ships that competed in Elmira. Ken Fendensen and Bellak hitch-hiked up from New Jersey to Elmira. "That was the Mecca of soaring at that time. We got to the old Caton Avenue Airport and had no place to sleep. There was a shack there and we slept overnight with papers over our heads. We awoke tired and hungry and looking for a job," he said.

He referred to an incident at the Rhodes Farm in Elmira. Richard duPont was going to take his father for a ride in a two-place Bowlus Albatross. As he was shock-corded off, duPont applied too much back-stick; the tail slammed down, the ship started to porpoise, and ended in the trees. While no one was injured, duPont's father was heard to say, "Dick, get me out of this damn violin box."

Bellak got a ride down to the Chemung County Airport (now the Elmira-Corning Regional Airport) where he met Martin Schempp, a champion German sailplane pilot, and Lieut. Hank Har-

Dinner at Wolf Hirth's home in Stuttgart, Germany. Left to right: Elliot Noyes, Lewin



Barringer, Harry Kellett, Martin Schempp and Ted Bellak.

ris, one of the instructors. It was there that he witnessed Harris's fatal automobile crash. Elmira's Warren E. Eaton Motorless Flight Facility is called Harris Hill in his honor.

At one Elmira contest, Richard duPont smashed the wing-tip of his Bowlus "Super Albatross" and Bellak repaired it in time for duPont to win that year's championship. "A wonderful man," the speaker said. "We had a fine relationship." For almost five years

(Continued on Page 14)

(Continued from Page 13)

Bellak worked with duPont in many capacities, including building a utility glider, designed by a protégé of Prof. R. E. Franklin, at the University of Michigan. "It was not too successful," Bellak said.

Later he went to Germany on a sabbatical to study their sailplane construction methods. "Even going right out into the forest and picking out trees, checking the rings to see if they were right for spars." He mentioned the huge, youth training facility at Hornburg, and meeting with the great German soaring pioneer, Wolf Hirth and his wife, Clara.

Then he mentioned probably the most rewarding transaction "since Peter Minuit traded \$24.00 worth of trinkets for the island of Manhattan." Before he left Germany, Bellak noticed a beautiful electric turn indicator on Martin Schempp's desk. Inquiring, Schempp said that it was especially made for Wolf Hirth for flying inside clouds. At that point Bellak produced a small model airplane engine he offered in trade, figuring to do a lot of cloud flying, storm investigation, cold fronts, etc. He wound up owning the first sailplane electric turn indicator brought to the U.S.

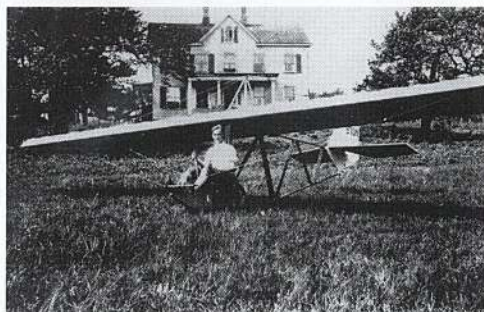
He talked about Lewin Barringer's nation-wide expeditions

Bellak's initial instruction was with this Mead "Primary Glider."

investigating, testing and proving various aspects of soaring flight, including wave soaring. Bellak said that he knew of the Germans' discovery of this phenomenon from his visits with Wolf Hirth.

As duPont's interest in soaring ebbed, Bellak was asked if he wanted to buy the "Minimoo." With no money up front, the young airman made a deal with duPont to borrow the ship "for three or four months and I'll start paying you." He took the "Minimoo" to New Jersey, set it up in a department store for \$200 a week, and made the first payment. Later he paid off most of it by flying formation aerobatics at the last Cleveland National Air Race before WW II.

Bellak went with Stan Corcoran in Frankfort, MI, to design and build a two-place trainer. "The darndest, coolest country I ever



Left: Bellak 'suiting-up' for a test flight of the Hutter 17, Harris Hill, Elmira. Below: Bellak (left) ground crewing for Lewin Barringer (in flying gear) who flew the Bowlus duPont "Albatross" at the Big Meadows, VA, soaring expedition.



Diagram Log of Lake Crossing

(Copy on page 12)



Drawing illustrates how Ted Bellak glided across Lake Michigan yesterday, the longest crossing of water ever made in a soaring plane.



Bellak in the "Dove of Peace Minimoo" and a contemporary newspaper illustration of his 1939 flight across Lake Michigan.

went into.... The snowstorms they had up there were unspeakable. I built the wings and tail surfaces and Stan built all the fuselage and controls." At the same time they were training college students to soar.

Always fascinated by the dynamics of the atmosphere, he plotted his next venture: an over-water sailplane flight across Lake Michigan (June, 1939). The coughing, sputtering, 450 horsepower Waco towplane went round and round, but could only get Bellak's "Minimoo," now named "Dove of Peace," up to about 13,000 feet of a planned 15,000 feet over Door County Airport, near Sturgeon Bay, WI. "There were car ferryboats that navigated back and forth across the Lake, so I navigated from boat to boat. They were alerted so that if I came down, they could fish me out."

Cautiously checking his variometer and altimeter, Bellak realized that he was correct in waiting for a cold front. There was lift over the Lake. "I only lost about 4,500 feet going over 157 miles of water." Heading to Frankfort, he still had 3,000 feet and was so elated that he treated onlookers to a series of loops and spins.



Bellak ready to test fly the Baby Bowlus "Boomtail," the first glider constructed by his N.Y.A. students.

As news of his pioneering over-water sailplane flight spread, Bellak was contacted by the Regional Director of the National Youth Administration and asked to set up the first federal training program in the country to build and fly gliders. The residence-type high school was set up to teach youth skills that would be useful in industry.

"We put together a butchered up "Baby Bowlus" and the bets were ten-to-one that it wouldn't fly," he said. While testing the now-completed ship at Jackson (MI) Airport, Bellak bubbled along at about 400 feet, then caught a thermal and whooshed the "Baby" up to about 4,000 feet. "Suddenly, thereafter, the number of applicants for the course shot up," he added, smiling.

With a contract from the federal government in hand, Bellak

The TG-2 University of Minnesota State universal multi-purpose, two-place training glider.

approached the Schweizer brothers in Elmira with specifications and plans for the youth group to build two of the new Schweizer sailplanes.



Next he was off to Washington, D.C., where the two student-built Schweizers were positioned on the Capitol steps for Congress and the public to view. The following day, Bellak was at the District's Old Congressional Airport hopping passengers from the federal government, the Army and the Congress.

After that he spoke before a U. S. Senate sub-committee on what he had accomplished and how much money was needed. "...And I'll tell you," Bellak said, "when you talk to legislators,



General Stratemyer and government officials in Bellak's Congressional display operation.

Navy Lieut. Cmdr. Ted Bellak, front cockpit, reporting for duty as a Naval aviator by glider.

you don't talk peanuts; you talk millions. But I had somebody from N.Y.A. right next to me, and I must have answered all their questions okay, because when I returned home, I found a telegram asking me to become director of the first, fifteen-school state-wide program."

There followed a university sailplane project where students designed and built a two-place ship which Bellak tested. "We received the first approved-type certificate given to a state by the C.A.A."

Though the program was a success, he said that he was voted out of office because "I saved too much money, and you don't do that with state and federal funds."

"Anyway, we parted company, and I joined the Navy," he laughed, "and that was the end of that."

The old-time flight instructor, teacher and sailplane builder, who'd given wings to so many, said, "I hope I've added a little bit to your knowledge of motorless flight in the United States."

Herman Stiglmeier

Long-time Soaring Society of America Director Bernald S. Smith, Fremont, CA, introduced the next Ralph S. Barnaby lecturer, Herman J. Stiglmeier. Smith recalled a time 35 years ago at El Mirage, CA, when he saw what appeared to be an illusion shimmering in the distance. As the phantasm drew closer, he made out the shape of Stiglmeier's can-like vehicle, fronted with an odd-looking round tub. Closer still, a showerhead jutted from the tub's round base. "Stiglmeier had a tank up there using solar energy so he could have a hot water shower in the desert after landing his

sailplane," he said. "That gives you a very short idea of what kind of guy Herman Stiglmeier is... But let him tell the story."

"Exposure to aircraft continues to be a great incentive," Stiglmeier announced, eyes twinkling from eight decades of aviation time-travel. "That's what happened to my twin brother and me."

At age 10, the Stiglmeiers lived at the south approach of what is now LAX. "Then it was part of the Freeman ranch. There was no airport there until the Graf Zeppelin landed there in 1930," Stiglmeier said.

"The thing that prompted us to get into aviation was a lover," he chuckled. He and twin brother Henry watched as the love-lorn pilot of a rotary, radial-engine biplane landed in a wheat field adja-



Herman Stiglmeier in a conversation with Air Force General Hoyt Vandenberg at the 1947, Grand Prairie, TX, 14th National Soaring Contest. Stiglmeier finished seventh in a Pratt-Read LNE-1. (NSM Archive Photo)

cent to what are now LAX's south runways. The airborne Lothario gave a nickel each to the awestruck twins for watching the ship while he visited his girlfriend. They were hooked.

The Stiglmeiers were content building model airplanes until about 1929. Then the 14-year-olds decided to build a 1910-vintage hang glider from plans they saw in *Modern Mechanics* magazines. "But the big mistake we made was, we didn't know what starching the fabric meant," the speaker said. "So we had a porous wing." After a disastrous chicken coop launch the whole project came to a crashing end.

1938 found the brothers with full drawings to build a German Grunau Baby IIB. They redesigned the fuselage, the original of which they considered too ugly and just built the wings using the metric system. A disagreement over the glider's construction resulted in Henry's withdrawing and buying in on a Bowlus Baby Albatross kit with two or three others. "And they put that thing together in no time," Herman said. He finished the Baby Grunau in 1940.

Stiglmeier and his crew took the new ship to Rosamond Dry Lake (CA). "The wind blows like thunder out there all the time," he said. They aimed the glider into the wind and windjammed on the ground, testing the ailerons, rudder and elevator.

Self-taught to fly, Stiglmeier had two hours of time in a biplane, and had never made a practice landing. "But after two week-ends, I was flying in big circles and coming back to land -- but at the wrong end of the dry lake. We had to walk the ship back to do it all over again."

One month later he was in a California contest where he was winch-launching, slope soaring and competing with the likes of John Robinson and Gus Briegleb. "And I went up and I was shaking so bad, I just couldn't make a turn. So I went on out and landed in the valley." Next, he launched and said, "No, I'm not going back there where all those rattlesnakes are." He made a sweeping turn attempting to land on the ridge. Unfortunately, he didn't know

(Continued on Page 16)



Herman Stiglmeier in one of the surplus Pratt-Reads. (July-August 1947 Soaring)

(Continued from Page 15)

how to make a landing in mountainous country and ground-looped his glider, buckling the fuselage.

After repairing his extensively damaged ship, Stiglmeier returned to Rosamund Dry Lake in 1940. By now he had built up about 25 or 30 hours' flight time. Releasing at 500 feet, he made a probing turn and corkscrewed his way up to 10,200 feet!

"All my life I've been a DDD kind of individual," he said. "Dream it. Draw it. Do it. And that's a good policy for any young man."

In 1941, Stiglmeier with his ship, and his brother, Henry, in the "Baby Albatross," were in a contest at Arvin, CA. They had a ham radio aboard for communication. The twins found themselves under a huge dome-shaped cloud. The speaker looked out over his audience and said, "That damn fool brother of mine was 200 feet above me. I said to myself, 'You fool, you're going to get sucked up into that thing.' And sure enough, he did."

Stiglmeier's brother Henry topped out at 18,000 feet, while Herman tried for a goal flight. The lift subsided and again he landed in the valley, "with the rattlesnakes."

Brother Henry's landing at Tehachapi, CA, looked very uncoordinated and wobbly. The extremely low temperature at 18,000 feet had caused all the control cables on the "Baby Albatross" to stretch dangerously, almost to the point of failure. On descending into warmer air, the cable-slack remained, making the tiny ship almost uncontrollable. Herman said that his brother was afraid to tell anyone that he had gone that high. Henry's flight poked through rigidly-controlled air space without government permission. "The authorities didn't know whether to kill him, disqualify him, or what to do with him," the speaker laughed. "Finally they just got tired of talking about it. He's lucky that he didn't spiral out."

Six months after America's entry into WWII, there was a knock on Herman's door. It was Capt. Floyd Sweet and two C.A.A. officials inquiring about Herman's glider. "I said, 'I don't have any glider.' Of course I was lying. I didn't want to lose it. But they got the best of me. They gave me \$850 for it...two years later."

Commenting on his Silver "C" badge duration flight in the "Baby Albatross," Stiglmeier groaned, "That ship had the lousiest seat ever designed. If you managed five hours in that thing, you had a stone posterior."

During the wartime years Stiglmeier was employed at Douglas Aircraft. Later he moved to St. Louis, MO, where he was associated with the Laister-Kauffmann organization. There he supervised work on the L-K TG-10A center section truss, and on the giant Laister-Kauffmann YCG-10 "Trojan Horse." A year after that, he returned to Douglas where he worked on the Waco CG-4A and a cargo glider Douglas was developing.

He told a story about Dr. Wolfgang Klemperer and William Hawley Bowlus taking one of the ungainly cargo gliders up for a test flight over Twenty Nine Palms, CA. "A C-47 (Douglas DC-3 in civilian life) towed them up, and they released at about 3,000 feet, and those damn fools stayed up there for 30 minutes; just soaring that thing like it was a little homebuilt glider," he said.

After the war, true to what Floyd Sweet had told him earlier, there were a lot of surplus gliders around, and it seemed like every-

one in the Southern California Soaring Association wanted one. Stiglmeier found out from the War Assets Administration that Pratt-Reads and Laister-Kaufmanns that cost the government \$15,000 apiece, were selling for \$350.

"I went back to Americus, GA, in a C-47. First, I was going to buy five. Next, I bought 10. Next thing you know, I bought 15. Well, Lordy, I bought 16." Four could be shipped on each open boxcar back to California. "Oh, I'll take that good-looking one over there." Then the new glider entrepreneur had 17 surplus trainers!

Towing the Pratt-Read in a rebuilt L-K trailer, Stiglmeier chugged out of Americus in a 1935 four-door Chevy, heading for California.

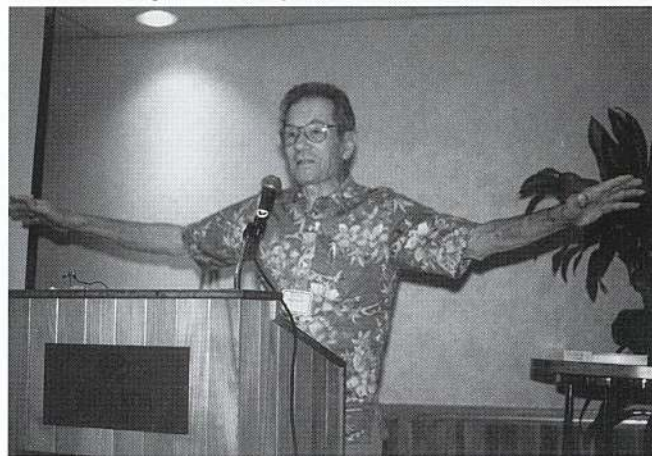
He called to his wife first. She said, "You get home the best way that you can, there isn't more money."

"I don't blame her for being mad," Stiglmeier allowed. "She had two children by this time. But I was in Heaven."

Three days and two nights later he was in Los Angeles "with \$20 in my pocket, and never had a hotel room." Forty miles from his Pomona home, the overloaded L-K trailer broke in half, but Stiglmeier repaired it the following day. "Wow! It was a great life. To think of what happened to all those gliders. The Sierra Wave flights...all the records that were broken."

He mentioned his seventh-place finish against the 80+ entrants at the Wichita Falls Nationals. The inefficiency of the launch method was apparent as the entire line of contestants moved up one position when the first ship took off. "It was such a physical thing," Stiglmeier said, "an endurance contest. The wait just burned me out." Even so, he earned his Gold "C," number 12.

On returning to El Mirage, he became interested in the launch



"I went to Americus, GA to buy five surplus training gliders. Next I bought 10. Next thing you know, I bought 15. Well, Lordy, I bought 17," Stiglmeier said. (NSM Staff Photo)

problem. In 1964 he figured out a method for using a 3,000, 4,000, 5,000-foot, vertical right triangle as an airborne start gate. When the sailplane passed through a system of ground references, at a predetermined altitude, or window, it was noted by contest timers. Timers would then radio, "good start," to the pilot. "The first time I used it was in Minden, NV," Stiglmeier said, "and it's been in use ever since."

Always sensitive to trailering sailplanes, Stiglmeier noticed the flimsy trailers that the German glass gliders were coming to this country in. So he "dreamed, drew, and did," the SST trailer. "Used to be that SST stood for Super Sonic Transport, but I used Stressed Skin Trailer," he said, adding, "that structure was really trustworthy." He said that Linda Fabrication copied it and made it better. "So I just went on to other things."

He closed, "I can say this: from 1930 to 1975, it has been 45 years of inspirational exposure, and that's what I've had."