

The Frequent Flyer

The Monthly Newsletter of Caesar Creek Soaring Club

March 2002

A New Sailplane Designer Takes Flight

(Part 1)

By: Chuck Lohre

Ever since he can remember Michael Greiner wanted to design segelflugzeuge. That's what he told me when we sat down for an interview at the Alexander Schleicher sailplane factory in Germany. As a young man he loved to study another Alexander's work – aviation pioneer Alexander Lippisch's beautiful futuristic drawings of flying wing sailplanes that pushed the boundaries of aerodynamics back in the Twenties.

Michael Greiner was born in 1974 in Erlangen, Germany, and as a kid built model sailplanes, as did Lippisch. Today, Michael is the youngest designer to be hired by a major racing sailplane manufacturer. His first project at Schleicher was designing an 18-meter version of the ASW 28 standard class ship. The ship will also be able to be flown as a 15-meter span, a first for Schleicher. But there is something special about

this design. The break point of the different span sections is far inside the wing tip. The 15-meter wing span tips are 2.25 meters long and the 18-meter wing span tips are 3.73 meters long. Thus, wing geometry in both spans could be optimized for less drag and the best flight characteristics in keeping with Schleicher's legendary designer Gerhard Waibel's philosophies.

Upcoming Events

Saint Patrick's Day Party

Saturday, March 16th, after flying
Green Beer and Snacks



Easter Egg Hunt and Party

Saturday, March 23rd, Noon



Towpilot Meeting and Cookout

Saturday, March 23rd, 5pm

May Day Party

Saturday, May 4th, after flying
Spring Garden Burgers for Everyone

WMGM Ox Roast

Sunday, May 26th
The CCSC Tradition Continues

Caesar Creek Soaring Club

P.O. Box 918

Waynesville, Ohio 45068

(513)932-7627

See our website at:

<http://www.wrightdesigns.ccsc>

ccsc

As a member of Caesar Creek Soaring Club, I've gotten to know John Murray, CCSC club member and Schleicher's U.S. sales representative. He invited my wife and I to dinner shortly before the 2001 Soaring Convention in Indianapolis. There, I had the privilege to sit next to Martin Heide, designer of the ASH 26 and ASH 25. (The "H" in ASH stands for Heide, as the responsible designer's surname initial is added to the model name.) Martin was in the States for a presentation at the convention and after we got to talking, he invited me to visit the factory. I didn't know then that my wife Janet would be invited to speak at a retail conference in Frankfurt, early in September 2001. Sure, I'd like to go along with her, I could visit the factory. Fast forward to September 1, 2001 as we landed at the Frankfurt airport. In just two days we'd be on the Autobahn making our way to the factory in the tiny village of Poppenhausen. Touring the factory, seeing Martin again and having the chance to meet both Gerhard Waibel (of ASW reknown) and Michael Greiner was a rare opportunity. In my mind, it would be like interviewing Ferdinand Porsche, founder of the famous sports car company. I was excited, but somewhat daunted by what I might learn from them.

In preparation for the tour and meeting these sailplane designers on their turf, I reread Fred Thomas's book "Fundamentals of Sailplane Design" on the eight-hour

flight over. This new English translation of the standard textbook for Germany's Akaflieds (student engineering clubs) finally started to sink in. Even Gerhard Waibel later told me he still refers to it. Prepared with some questions as a wannabe sailplane designer, I arrived at the Schleicher factory on an overcast

afternoon. There would be no flying today. Waiting for the appointed time to meet with Martin and Michael, I wandered out to the airfield where two ASW 22s were tied out fully assembled with covers.

The picturesque AS factory is built into a hillside and features dozens of different rooms on various levels. I asked Martin, who was acting as tour guide, about the building's past – had it always been the AS factory? Yes, indeed it had always been home to Schleicher. Back in the Twenties, gliders would land near Alexander Schleicher's furniture shop and some needed repairs. Alexander took an interest in the strange flying machines and was soon applying his furniture design and construction know-how to repair the local daredevils' ships.



In the factory's lobby is a beautiful display case with models of every AS aircraft. I learned about Rudolph Kaiser -- Schleicher's first designer -- by studying all the ships he had created. I read his numerous awards prominently displayed on the walls. Each designer has unique styling traits that manifest themselves in their aircraft. Rudy's ships were always sleek, stylish and named after soaring birds, native to the verdant Rhon Valley where Schleicher is located. "Rhonlercher", "Rhonsegler", "Rhonadler". Even his tiny K-1 was the "Rhonlouse" (Flea). Gerhard Waibel's efforts were equally bountiful. One of Gerhard's design traits is his "no-compromise" racing sailplanes. It's

why you don't see 18-meter tips available for his 15-meter racing class ships. The aerodynamics of a 15-meter ship are different from that of an 18-meter ship and Gerhard won't give up his principles. Standard class ships are a better candidate for interchangeable wing lengths because of their lower wing aspect ratio. Another of Gerhard's signatures is his emphasis on crash-worthy fuselages. "Those pilots are my friends," the ardent racing pilot told me.

Martin Heide also has a unique design sense. He started with Schleicher in 1981 and now has two home runs under his belt. Both the ASH 26 and ASH 25 have been tremendously successful. To date, more than 300 ASH 25s have been sold worldwide.

But now the question is how new designer Michael Greiner's philosophy will reveal itself? That's what I traveled more than 4000 miles to ask. I wanted to know how and why sailplanes are designed. In my day job, I specialize in marketing communications for industrial products such as machine tools, chemical processing vessels and aggregate mining machinery. Trying to uncover the relevant benefits and features of those machines has always been challenging. To me, though I'm an outsider, it often seems as if no one at these companies actually knows what's going on in the field. Gerhard set me straight about sailplane design, "It's all about racing," he said.

Media Day May 4- 5, 2002

Rain day

May 11- 12, 2002

Purpose: To introduce the local media to the sport of soaring.

We invite local media to come for introductory sailplane rides. The flights may be video taped by another aircraft, or from the cockpit as you fly. Your ride will be in a two-passenger club ship piloted by a commercially rated club member who is volunteering their time to introduce you to the sport.

Why would we do this? Good question ! We have a very special event coming up in January 2003. We have been given the task of hosting the Soaring Society of America's annual convention in Dayton the weekend of January 23 - 25, 2003. This convention consists of static aircraft displays, exhibitor booths, and lectures on the newest innovations and various issues that effect soaring in the US.

The general public is welcome to attend.

In connection to the general celebration of flight in Dayton, our convention is one of the first events to begin the 2003 Century of Flight celebration.

Any public announcements to help us get the word out to the general public would really be appreciated.

**Introduction to Soaring
Flights begin at 11A.M.
Flights end at 4 P.M.**

Hot dogs, chips, drinks, will be served all day.

**Region 6 South Contest
August 25-30, 2002**

Chuck Lohre - Contest Manager.
Jim Price - Competition Director.

Volunteers Needed!!!

Please contact:
Chuck Lohre
3015 Beaver Ave.
Cincinnati, OH 45213
513-731-3429 or chuck@luhre.com

**Annual Towpilot Meeting
Saturday, March 30th, 5pm.**

Safety and operational issues to be discussed.

A cookout will follow the safety program .

Minutes of the CCSC Board Meeting February 2, 2002

Location: Clubhouse at Caesar Creek Soaring Club

Present: Jim Miceli, Jim Lowe, Jim Price, Greg Crook, Mike Karraker, John Murray, Don Burns.

Absent: Dick Eckels, Bill Parr.

Guests: Jim Hurst, Rolf Hegele, Bill Maxwell, Bob Root, Jeff Chiles, Dana Colvin, Aaron Sorrell, Joe Jackson.

The meeting was called to order at 9:40 AM

The minutes of the previous meeting were read and approved.

Jim Lowe reported we received a past due sales tax bill for \$3000 that had already been paid. The problem has been resolved. January expenses were about \$23,000. The awards dinner brought in about \$2,400. Not much cash flow predicted for February. The SSD lease will probably be paid in mid March. The 2002 budget was discussed and it was suggested we compile a list of members who don't pay their dues in a timely manner going back 24 months.

Mike Karraker reported that Derek Piggott is coming to speak at the safety meeting on Saturday the 23rd of February. The annual crew chief's meeting will be held in early March. A list of supplies needed includes Tost rings, Schweitzer rings, 3 spools of tow rope, and paper drinking cups for use at the flight line.

Bob Root will purchase new batteries for the poor performing golf cart. The cost of new boards for the clubhouse deck is about \$800.

John Lubon and his dad are checking the campground electrical system.

Brian Stoops is working on the new hangar barn proposals.

Greg Crook reported that the tentative date for next year's annual banquet will be in late February or early March.

A card was sent to Jim Bixler's widow and a \$100 donation to the Robertson Trust Fund in Jim's honor, from his friends at the Caesar Creek Soaring Club.

Easter Egg Hunt and Party

Saturday, March 23 - 12 noon

RSVP Kim Paar at mariner1@aol.com
or (614) 775-0050

Minutes of SSD Board Meeting February 16, 2002

Location: Clubhouse, 5285 Elbon Road, Waynesville

Present: Pat DeNapels (Treasurer), Robert Gaertner, Joe Jackson (Coordinator with CCSC), Charles Lohre (Assistant Treasurer), John Lubon (President), Norbert Maurer, William Maxwell, Robert Root, Dieter Schmidt (Secretary). **Absent:** None.

The meeting was called to order by the president at 9:50. The minutes from the last SSD Board meeting on November 3rd, 2001 were approved. The minutes of the joint board meeting in January were recorded by the secretary of CCSC.

The treasure's report for the 2001 was approved. All loans for the ASK-21 have been paid off and therefore the new glider has been completely paid for.

Old Business: Pat DeNapels reported, that there is an offer out for the 200 acres directly to the south of the airport at \$7,000 an acre. It was not known if or when the land will be developed. There was no news on making CCSC airport a public use airport.

New Business: The budget for 2002 was discussed and compared with the expenditures for 2001. No major purchases are anticipated for 2002, nevertheless, the different projects mentioned at the joint board meeting need to be budgeted and prioritized:

1. Replacement of the wood on the deck at the clubhouse. Bob Root estimates the cost for the wood to be around \$800, provided that the old structure can be used.
2. Bob Root reported that the golf carts with 48V batteries would not be cost effective. The batteries are much more expensive and the electronics is also more complicated. The 48V batteries allow usage in a hilly terrain, but they do not guarantee that the carts will last longer. The electric golf carts of the club have been back for service about once a year. In order to transport them Bill Maxwell has rented a trailer each time. It is not worthwhile to buy a small open trailer for that purpose. Nevertheless, if one should become available it will be reconsidered.
3. John Lubon reported that his father, who is an electrician, estimates the cost of new electric service to be around \$5,000. One possibility is to use the new service just for the campground.
4. John Lubon estimates that the additional drainage lines for the runway will cost around \$5,000 and the drainage near the trailer hangars would come to about \$2,000.
5. Bill Maxwell reported that the engine of the Kubota has reached its expected half-life and that more expensive repairs have to be anticipated in the future. He proposed to buy a new mower and to keep the current one as a backup or to trade it in. He will find out what the trade-in value of our Kubota could be.

Brian Stoops has received a quote of \$27,494 from Wayne Builders for a new hangar with five bays. The size of the hangar will be 38'x50'10'. The doors are 9 feet wide and trailers for open class gliders can be stored in this building. Brian Stoops was authorized to proceed further with this project, to get the lease with the future tenants and to get the money. He was reminded that the contract with Wayne Builder will be signed by SSD.

There was no news on the land on the approach from the east to the airport. There are 80 acres, which belong to the estate of Stolle. If houses were to be built there it could curtail glider operations. On the other hand the club does not have the money to buy the land at \$7,000 an acre. Also the monthly payments on a 30 year mortgage would be very high, so that the club dues would have to be increased, which in turn would cause many members leave the club. In order to raise money some of the land owned by SSD could be sold for building lots to interested members. Norbert Maurer and Bob Gaertner will report back what different options the club could consider.

Chuck Lohre reported that of the 68 stockholders in SSD with unknown addresses he has been able to locate about half. Some have agreed to donate their shares to SSD, whereas others have indicated that they plan to redeem their shares. The effort of Chuck Lohre is important for the upcoming election, as at least half of all outstanding shares need to be voted. The terms for Norbert Maurer, William Maxwell and Robert Root expire this time. Persons interested in running for the SSD board should contact the president or the secretary.

Meeting adjourned at 11:45. Next Board Meeting: Saturday March 16 at 9:30 am.

Respectfully submitted by Dieter Schmidt, Secretary SSD.

Minutes of the SSD-CCSC Combined Board Meeting January 19, 2002

Location: Kings Island Conference Center

Present: Jim Miceli, Bill Parr, Don Burns, John Murray, Greg Crook, Mike Karraker, Jim Price, Bob Root, Bill Maxwell, Pat DeNaples, Dieter Schmidt, Joe Jackson, John Lubon, Chuck Lohre.

Absent: Dick Eckels, Jim Lowe, Norbert Maurer, Bob Gaerttner.

Guests: Brian Stoops, Rob Cluxton, Tom Holloran.

The meeting was called to order at 12:16 AM

Drainage: Field drainage between and around the new hangar barns, and the south side of the field was discussed. The drainpipe on the south side of the pond needs to be replaced with a solid pipe. John Lubon and Bill Parr will address the issues. Cost estimates for the project will be obtained. The Board will decide whether to have all or part of the work done. Any unfinished work to be accomplished by members. Member comments are solicited about how to deal with the swale between the segmented circle and the pond.

Trees: The current plan is to get rid of the trash trees and brush, and leave the good stuff, unless the good stuff creates a safety hazard.

Dump: We are getting rid of it. We discussed how to accomplish this. A cost estimate will be obtained. Meanwhile- **NO DUMPING PERMITTED.**

Campground electrical system: A new plan for a second electrical system was discussed. John Lubon and his dad offered to come up with a new plan for a 2nd electrical service, and address current problems that some site members are experiencing.

Picnic shelter again! Annual discussion about what to do with it. Fix it, kill it, modify it, if we wait long enough it won't be a problem, store club stuff in it, store members stuff in it at their own risk, get cost estimates to repair it etc. To be continued next year! Not!

Clubhouse: Needs a new deck. Bob Root will head up the project. The clubhouse also needs paint, and exhaust fans for the bathrooms.

Crows nest: Needs maintenance. Inspect and make recommendations.

Runway: Kent Sorrell and Jim Miceli are working on the drain grate in the south central part of the runway.

Campground pads: Any new pads to be paid for by site renter.

Golf carts: Discussed buying a 4th golf cart, 48 volt verses 36 volt carts. Decided not to buy an additional cart but to buy a new set of batteries for the poor performing cart.

New hangar barn: Placement will be east of the current buildings. Members must put up the money before the contract is let. The club decided not to buy one of the bays in the proposed new barn.

Aircraft: 15H should be repaired in about a month. Deferred discussion about purchasing additional aircraft until next year.

Tow pilot requirements: Rob Cluxton proposed eliminating the private glider rating for tow pilots in order to have more tow pilots.

Insurance: Bill Parr will discuss insurance issues at the February CCSC Board meeting.

SSA costs increasing: Club costs also increasing and will result in a dues increase.

Derek Piggott: Derek will be a guest speaker on Saturday the 23rd of February at 4 PM in the clubhouse.

Meeting adjourned 3:31 PM. Submitted by Don Burns, CCSC secretary



Come join Bob Root and Pat De Naples on their 28th annual Spring Ridge Soaring Camp at Tom Knauff's and Doris Grove's Ridge Soaring Gliderport in Julian, PA. In 1975, Bob, Pat and John Bennet mined three diamonds, a Silver Badge, and three Gold Badges in two days in the same 1-26 in those fabulous hills of Pennsylvania. There's lots more treasures yet in those hills waiting for you, too.

We plan to leave on April 21st for a ten-day camp. To date the following will also be there: Mel Williams, Jim Hurst, Bill Maxwell, Max Marshall, Jim Price and Rolf Hegele.

If you're interested, contact Pat or Bob for more info. Bring your own pick, shovel and pan.

Congratulations To:

Dave Taschuk for earning his private glider rating Feb. 9th

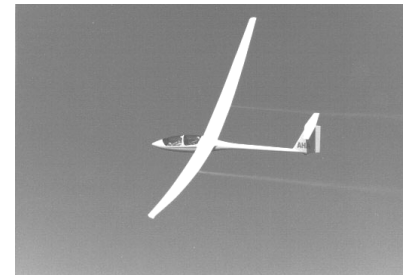
Jim Benner for his first solo flight on Feb. 9th.

Welcome New Members:

Mary Jett of Lawrenceburg, IN

Steve Shields of Batavia, OH

For Sale: One-fifth share of Big Wings, ASH-25E, including Cobra trailer, competition instruments, new winglets and 55-1 L/D. Contact Greg Crook at 513-494-1350 or email gregcrook@att.net.



INSTRUCTOR'S CORNER

A New Experience

By Jim Hurst

You would think that after a thousand or so instruction flights a CFG would have seen everything. Last month I found myself in a spiral dive, which I had never seen before. It is one of those potential emergencies which you may talk about, but which you don't practice because it is a little awkward. I don't really remember discussing it with a student before.

A spiral dive is a condition where the aircraft is in a steep bank, such as 45 degrees plus, and the nose is below the horizon. This results in very rapid acceleration, where in a slick high performance sailplane, you could go past the never exceed speed in a surprisingly short time. The intuitive recovery is to pull the stick back to raise the nose to slow down, but, this only results in tightening the turn and continued acceleration. It is similar to the spin, where the intuitive recovery method is to pull the stick back to raise the nose and this only makes things worse.

My student and I discovered that you can slip into this condition from a poorly executed entry to a steep turn. We rolled into a steep turn to the left and the yaw string indicated a severe slip. The glider in self-preservation lowered its nose just like it is designed to do, then the airstream began to scream. I said "Whoa!" and tried to push the stick forward, finding that the student had it hauled back almost to the stop. I had to yell "I got it!" to get him to relax his grip.

Langweische to the rescue! Whenever anything goes wrong, you can't go wrong by pushing the stick forward first. To recover from a spiral dive, the procedure and order of things is the same as the recovery from a turning stall. First, stick forward to unload the wing, second, level the wings and finally, gingerly raise the nose to the horizon. You should not try to level the wings first, you are already at a high angle of attack and the ship is accelerating. If you then increase the angle of attack further on the low wing, you are liable to break something and spoil your whole day. You should also not try to do steps two and three at the same time, because you are increasing the angle of attack to raise the nose to slow down, and then compounding the problem by increasing the angle of attack on the low wing tip. The recovery should be in three distinct steps.

Before this, it had never occurred to me that you can slip into a spiral dive from a severely slipping steep turn. A few years ago, I may have been on the verge of this in the Libelle on a good soaring day when the visibility was only three or four miles and there was no horizon. Going into a steep turn, suddenly things did not seem right and I quickly recovered from the turn, and realized that I had momentarily lost attitude reference. I then looked around and realized that I had no definite horizon and could not be sure if the wings were level or not. This can happen to you too. I decided it was not a good day to fly.

I wanted to take a moment to thank Gil for all his hard work in crafting the newsletter over the past few years. As of this issue, Gil Stengel has handed the editorial pen of the Frequent Flyer to me, and I'll strive to maintain the quality of the Frequent Flyer.

Submissions to the newsletter may be either sent via email to aaronsorrell@ameritech.net, or to:

Aaron Sorrell
128 McDaniel Street
Dayton, Ohio 45405

All articles are welcome and submissions to the Frequent Flyer are greatly encouraged!

Aaron Sorrell

I want to let everyone know that the CCSC web site has been updated with a new look and several new features, the most significant being an interactive calendar. It allows any one with a login to add or edit events. It's possible to scroll through the months to see what will be happening at the club, including crew days with a complete crew list. The events for the next 15 days are displayed on the home page as well. Any one responsible for activities at the club should request a login so you can enter and edit the information directly.

The Bulletin Board has been reinstalled (all of the original logins and passwords were preserved, but the old posts were not). The biggest difference is that no login is required to post (though you will not be able to edit/delete a post or receive email notice if you do not login). I hope this will cut down on the "hassle" of using the board and lead to more use. I would like to find members who would be willing to moderate several forums. This would entail receiving an email when some one posts, and responding with a timely answer. The club generates a number of guest rides and prospective members through the site, so if we could make ourselves available to answer questions, it would be a benefit for them as well as for us. I'd also like to find several instructors who could moderate a "student" forum. I will make a tow pilots, instructors and crew chiefs forum, if any one thinks it would be useful.

A couple of minor additions: members can upload and share photos with the CCSC Photo Album (see "members" page), and I am working on a "postcard" feature that allows any one to send a customized "greeting card" from the club.

There are several other things I'd like to see: online payments for club bills, contest fees, sales of guest ride certificates, books, t-shirts and accessories; a club history (any one who wants to write something up, and any one with good archival photos, please let me know); more information for guest / prospective members (good directions to the club please!) and more soaring specific weather information. if you have any links, suggestions, etc. you'd like to contribute to the site, please email me at ccsc@wrightdesigns.com or log in to the bulletin board. Thanks!

Randy Wright

P.S. check out Rob Cluxton's site for members, you'll need a login so email him at: rcluxton@cinci.rr.com

Camp Site People: Trailers Wanted!!!

Do you have a trailer you would be willing to rent for a week in July? The Women Soaring Pilots are coming to CCSC during the week of July 8-12. Some of the women would like to enjoy a week totally immersed in soaring by renting a trailer at CCSC. Would you be willing to share your trailer?

The women will pay \$100 for the use of your trailer beginning 3:00 p.m. on Sunday, July 7 and ending at 3:00 p.m. on Friday, July 12. This arrangement helps both you and the club. Fifty dollars will go to you, which covers the cost of your trailer for two months. Not bad for giving it up for one week! The remainder of the money will go to the club to cover the extra showers, electricity, etc. incurred by the seminar. This was a win-win situation at the last seminar, and we think it can be again.

If you are willing to rent your trailer, please let me know. The lucky woman who rents your trailer will thank you. (More importantly, she will pay you for it.) Contact me at sorrell@erinet.com or 937-855-7135 if you are willing to participate. Thanks.

Janet Sorrell

Crew Schedule

Date	Crew Chief	Tow Pilots	Instructors	Ground Crew
1st Sat & 11/30	J. Chiles A. Sorrel	J. Armor D. Colvin	R. Hennig W. Miley C. De Berry	J. Beaupre, T. Bresser, E. Jones, G. Daugherty, J. Lowe, P. Nord, Dave Edwards
1st Sun & 12/29	M. Karraker R. Carraway	M. Maurer N. Maurer D. Schmidt	A. Swanson J. Sorrell	W. Van Breukelen, W. Schmid, B. Towne + family, J. Pruden, Rawson
2nd Sat & 8/31	R. Root D. Staarman	J. Antrim R. Anderson	J. Price J. Hurst M. Williams	J. Biernacki, B. Connolly, W. Detert, S. Trefzger, J. Benner, C. Deberry, C. Sheets, Lorenz
2nd Sun & 9/29	D. Menchen J Muth	L. Kirkbride F. Hawk T. Holloran	G. Wade T. Rudolf	R. Anderson, M & L McKosky, K. Menchen, P. Pedersen, J Palfery, M Debeque, Dorosz, J. Mcdonald
3rd Sat & 6/29	R. Griffiths B. Gaerttner	D. Dreager T. Murphy R. Hegele		B. Boesel, R. Weaver, D Klebanow, D. Rivers, E. Lopez, H. Huester,
3rd Sun & 6/30	J. Morari B. Paar	Gene Owens Bill Oagley	R. Eckels* J. Walasek	D. Agin, J. Horman, K. Sorrell, A. Colvin, T Huester W Paar, B. Cooper, J. Koons, Keller
4th Sat & 3/30	J. Miceli J. Murray	T. Bales G. F. Byars S. Day	J. Jackson**	T. Spillane, C. Lohre, H. Meyerrose, E. Saladin, B. Stoops,
4th Sun & 3/31	D. Holzwarth M. Statt	F. Paynter A. Widner R. Scheper	G. Penner	D. Burns, E. Butler, R. Cedar, Dan Edwards, W. Gabbard, J & P. Lubon, Dave Hoskins, Dave Carr, G. Stengel, G. Crook
Floating Crew		R. Cluxton R. Garrison G. McDowell E. Gieselman	R. Cluxton R. Garrison G. McDowell E. Rutherford T. Buker	

*Designated Examiner **Chief Instructor For additions/corrections contact Mike Karraker at 513-932-6251*_If you are not assigned to a crew and would like to be, contact Mike Karraker at 513-932-6251