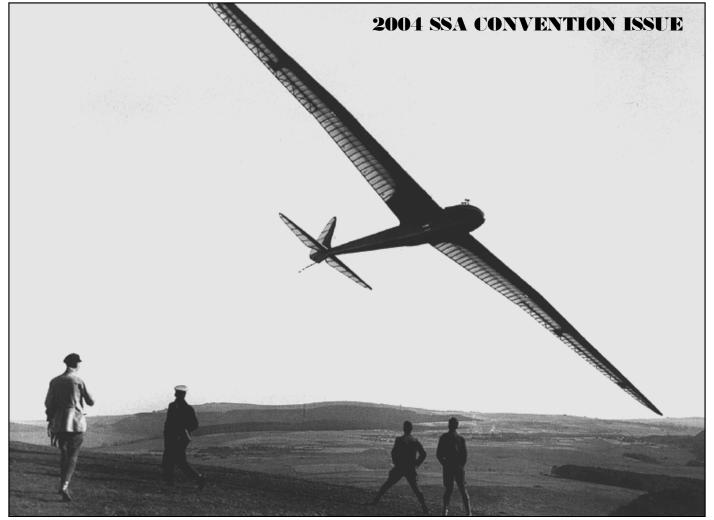
APS NEWS

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March-April 2004



Seen above at Wasserkuppe the 1930 19-meter Fafnir which was considered one of the most beautiful gliders of its time. Pilot Groenhoff, after an aero tow, flew 278km and became the first pilot to exceed 200km. The record was not officially accepted because of the aero tow so Groenhoff made a bungee launch and flew 220km to break the record. This image taken from the book <u>Sailplanes 1920-1945</u>. See page 2.

What Happened at Atlanta....

ASA had a successful showing at the SSA Annual Convention in Atlanta, GA 5-7 February 2004. Over 78 people attended the Motorglider Breakfast where several key events took place including special awards presented to Wilhelm Dirks and Pete Williams. AMS-Flight, Representatives from Stemme, Schleicher, DG Schempp-Hirth, Ximango were recognized and gave short talks. Rick Howell presented details and schedules on the Alamogordo NM and Taos fun fly events plus an announcement that the 2004 Auxiliary Powered Nationals will be held in Fredericksburg, Texas August 23-28. See details inside starting on page 3.

John Lubon, winner of the Return to Kitty Hawk Motorglider Class covered the some of the flight events with a slide show. Wilhelm Dirks, design engineer from DG gave an interesting talk on motorglider design concepts and prototypes he was involved in prior to his tenure at DG. At the director's meeting a decision was made to establish an archive file of back newsletters in the ASA web site.

.....ASA Membership Poll.....

If you would prefer to receive APS NEWS by **E-Mail ONLY** (no mailed issue) advise Pete Williams at <sls0526@pyramid.net>

LETTERS TO THE EDITOR

Dear Editor:

I would like to commend the authors of the article "The Sailplane Pilot & Stalls and Spins" in the January-February 2004 issue of *APS News* for focusing on what is a troubling subject which seems to continue to be a problem. The soaring community continues to suffer unacceptable losses as a result of pilots who stall and spin at a height where recovery is impossible. I believe, however, a couple of important things involving recognition and prevention are lacking in the article.

First, if a safe margin of airspeed over the stall is maintained, it is highly unlikely that the glider will stall. In calculating what this should be, the pilot must remember the effect of bank angle causing increased load factor and stall speed when in a turn. At a bank angle of 60°, the stall speed will have increased by 40%. Second, even if the glider stalls, if no yaw is present (i.e. keeping the yaw string in the middle) it will not spin.

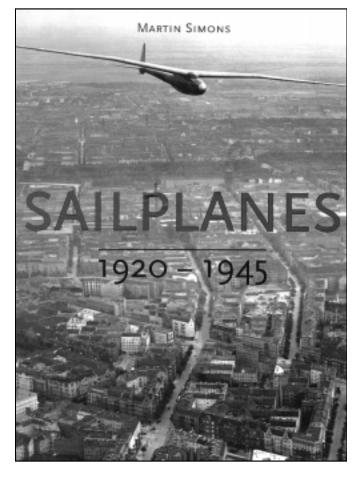
While stalling on the approach is bad, in most cases it can be stopped simply and quickly by moving the stick forward/nose down resulting in only a little height loss. Spinning as well brings a much greater problem when safe flight can only be regained after some delay, taking the correct recovery action, and losing a great deal of height.

Although the first paragraph of the article hints that lack of currency/familiarity is an aggravating factor, it fails to state clearly that familiarity and recency in experiencing and identifying the signs of an upcoming stall/spin are a great way of reducing the risk of them occurring inadvertently. This means practice, if not training with a qualified instructor.

Lastly the description of the spin entry phase of the "classic spin recovery" is correct – "stall the aircraft by continuous application of up elevator and apply full rudder at the stall to induce the spin". However what is not said is that current spin training has turned its back on this semi-aerobatic maneuver, which no sane pilot would or should be doing close to the ground. What we should be looking at is the entry as much as the recovery. Prevention is better than cure! The entry described is not what kills pilots!

The correct approach to spin demonstration and training should involve a gentle (meaning insufficiently banked) turn just above the stall followed by application of rudder (yaw) in the mistaken belief that this will increase the turn rate – a pilot-induced stall and spin. Indeed, in many gliders, it is possible to induce a spin departure with the nose at the normal approach attitude if enough yaw is present! That is the configuration that leads the unsuspecting/uncurrent pilot into the "coffin corner" and the irrecoverable departure as much as the errors described in the article.

Sincerely, Dean Carswell



Book Review

Sailplanes 1920-1945 By Martin Simons 256pp 12X9.5 hardbound Printed in German or English Published by Eqip Werbung & Verlag GmbH, Hauptstr 276, Konigswinter, Germany Web Site: <www.eqip.de> ISBN 3-9806773-4-6

This is an informative and historical book by Australian Martin Simons including highly detailed scale drawings and many rare photographs covering the early days of gliders, motorgliders and soaring. It also covers sailplane development in 13 countries during this time period.

Two other books are available authored by Simons and published by Eqip in the same format are: Sailplanes 1945-1965 and Sailplanes 1965-2000. The soaring history in these books including motor glider designs will be a valuable addition to any soaring library.

Crosswind Takeoffs with Retractable Engine Motorgliders

In the four years that I have owned a DG-808B I have witnessed several incidents on takeoff that could have been avoided included my own incident. The DG-808B and most of the motorgliders that use retractable engines and propellers that are raised out of the top of the fuselage have on takeoff an undesirable attribute. They produce a torque that pushes the nose of the glider down and lifts the tail up. This torque is a function of the engine power and is a maximum at full throttle. With the DG-808B, at full power and stationary, the tail will be lifted and the nose will hit the ground. Not good! Note this can still occur with the stick held fully back although the torque will be reduced by the air flow from the propeller over the upward pointing elevator.

OK, another consideration: Most gliders have a single wheel undercarriage and that translates into a reasonable horizontal bearing especially when the glider is rolling. So what do you have on the initial roll? A near perfect weather vane! Think about it. With any normal undercarriage (tricycle or tail dragger) the main 2 wheels are on the ground so that, on initial roll, it requires a lot of horizontal pressure to move the aircraft from its course. Not so with the DG-808B and similar motorgliders. In fact a small amount of horizontal torque can rotate these motorgliders on initial roll from their desired course along the runway. And what would provide that horizontal torque? A crosswind of course! And what were the incidents I have witnessed? People taking off in strong crosswinds weather vaning by 90 degrees or so into the wind and rolling off the runway. If you own one of these machines understand their unique characteristics at takeoff and act accordingly.

So what should ones takeoff procedures be? Here are several thoughts:

- 1) More so than with most aircraft choose the runway with the least crosswind and if the crosswind component is greater than 15 knots only takeoff if you are sure you can do it safely.
- 2) Get into the habit of holding the stick completely back on initial roll irrespective of wind conditions and gently bringing the stick forward after gaining at least 20 knots of airspeed. There should be NO exceptions to this rule.
- 3) Gently increase power on initial role to maximum power at about 20 knots air speed so that you have rudder authority before lightening the effective tail weight.
- 4) Be ready to immediately abort if the situation gets out of hand such as a dust devil coming across the runway. Be ready to immediately power to idle, steer (if possible) to a good stopping place and stop. Remember if you slam on the brake you will rotate the motorglider onto its nose and will do some superficial damage. The brain has to be fully functional during every self-launch.

There have been too many incidents. Most of these incidents could have been avoided. The DG-808B and similar motorgliders are not the easiest machines to launch in crosswinds and I believe it is absolutely necessary to have consistent takeoff procedures: (A) Stick fully back on initial roll. (B) Power low on initial roll. (C) At about 20 knots full power and stick just back of the neutral position. Do this on every takeoff even though the wind might be zero so that if something bad happens you don't have to think where power and stick should be. It would probably be too late then anyway.

Submitted by David Bingham

TAOS AND ALAMOGORDO SOARING 2004 EVENTS

There will be two soaring fiestas in New Mexico. The fun starts in Alamogordo with the White Sands Soaring Association. The Aux-powered Sailplane Assn. had a meet in Alamogordo last year and it was great. For 2004 WSSA will organize the Fiesta and hope that it will become an annual event. The details are on their website:

http://www.netmdc.com/~geo/WSSA.htm
The dates are 29 May thru 2 June. Tow Pilot
Bernie Gross will be arriving early and will
tow starting on the 23rd of May. Please
indicate on your registration (available on the
website) when you will arrive. Be ready to
help each other, because the club won't have a
full staff until 29 May. The clubhouse will be
open and oxygen available. Send your
registration forms and fee to the address on
the form.

The Jim Crisp Memorial Taos Soaring Fiesta will follow the Alamogordo Fiesta. I am sure that those pilots who have crews will fly 250 miles north to Taos. The dates are June 3rd through June 6th 2004

- * Registration is limited to the first 25 sailplanes who sign up. As of February 15 entries were signed up.
- * If you have an interest in coming let us know by responding to Terry's email or call Angel Pala at 505.758.4790 (day/night) Terry Blankenship email

<mailto:Tblankenship@csi.com>
Tblankenship@csi.com

Submitted by Rick Howell

"Guide to Self-Launching Sailplane Operation" 3rd Edition Now Available

Eric Greenwell has extensively revised and expanded his previous edition (written over four years ago), with much more material and pictures. This new edition covers more types of powered sailplanes than before. emphasizing common methods and concerns, rather than things specific to only one model. In addition to Eric's experience, this guide reflects the experience of it's 12 reviewers from the USA and Europe. It is the most complete guide available today.

The guide is now available on the ASA we bsite< http://www.motorglider.org (click to the "Articles On-line" section). A commercially printed version is planned for the future.

ASA ACTIVITIES AT THE 2004 SSA CONVENTION IN ATLANTA, GA 5-7 FEBRUARY



ASA Directors L-R: Pete Williams, Rick Howell, Chairman-Skip Atwell, Oliver Dyer Bennet, Eric Greenwell, John Sullivan and Brian Utley. Not present: Stan Nelson.



Karl-Friedrich Weber, President of DG, discusses efforts to date in the acquisition of the LS sailplane line. Herr Weber rescued DG in 1996 and has since converted it from the ground up to a modern production and service facility for sailplanes.



Wilhelm Dirks holds a plaque honoring his design efforts in self-launching sailplanes presented to him by Pete Williams, ASA Founder. Skip Atwell, ASA President later presented an award of recognition plaque to Pete for his 16 years contribution to the motorglider movement.



Wilhelm Dirks, design chief at DG, discusses DG's "Noah" glider cockpit escape system.



Left: Karen Stemme-Burger, daughter of Dr. Reiner Stemme and Bret Willat of Stemme-West, the USA dealer.

Right: Wilhelm Dirks with Oliver-Dyer Bennet, the US Dealer for DG.



ASA FINANCIAL REPORT

	2003	2002	2001
Income			
Dues	6786	7847	6920
Interest	54	62	75
Sales	476	547	433
Total	\$7316	\$8456	\$7428
Expense			
Newsletter	4314	5974	5197
Roster	225	0	728
Supplies	890	374	908
Miscellany	0	0	119
Total	\$5429	\$6348	\$6952
27	#100	#21 00	**
Net	\$1887	\$2108	\$476
Bank Balance	\$12253	\$11575	\$8634

Note that we now have some multi-year liabilities because dues can be paid for several years, so the bank balance is not as "fat" as it appears. Eric Greenwell, Treasurer

2004 Auxiliary-Powered National Championship & 20-Meter 2-Place Competition Gillespie County Airport, Fredericksburg, Texas. Aug 23-28 (Practice Aug22)

These competition events are sponsored by ASA. To enter send \$250 Entry Fee by June 22 . Late entry fee is \$100. Tows are \$40. Competition Director- Bob Dittert; Contest Manager-Jo Ann Dittert, Scorer -Bob Dittert. Registration forms available from Jo Ann or Bob Dittert at 281-261-4001 or Cell 505-390-9584 or Email: <Bjdittert@aol.com> Submit entry form with deposit of \$100 and pay balance by 0900AM first contest day.

COME FLY WITH US IN THE BEAUTIFUL HILL COUNTRY OF CENTRAL TEXAS

Make checks payable to: Jo Ann Dittert, Contest Registrar, 1705 Patricia Lane, Missouri City, TX 77489-1433

Russia Sailplanes Update

As most people already know, Russia Sailplanes has terminated its business with AviaStroitel and is in the process of liquidating assets. After nearly a decade involved with the Russia I felt it was time to move on for a variety of reasons and decided to sell the business; we searched for a qualified buyer for almost nine months and were shocked when the factory refused to work with our chosen successor. Apparently they felt I was free to do what I liked with the business itself, but the dealership was not considered to be my property. The deal fell through, so I quit.

Since the beginning we imported a total of 81 Russias of all types: 18 by the original dealer and 63 by Russia Sailplanes. That's a fair sized fleet in the U.S. considering only a few were sold each year at the start. All told, AviaStroitel was just three shy of the 100 mark when production was temporarily suspended for lack of a dealer in the US. I am told that negotiations are in the final stages with a new dealer and production will resume in the summer of 2004. The new AviaStroitel website (in Russian) is http://aviastroitel.nm.ru and it appears that soon there will be a new dealer up & running in the US.

Bill Ard Russia Sailplanes

ASA Board of Directors

Election 2004 - Retire 2007

Greenwell, Eric Treasurer
Nelson, Stan Safety
Utley, Brian Membership

Election 2003 - Retire 2006

Atwell, Lloyd President Sullivan, John Secretary

Election 2002 - Retire 2005

Dyer-Bennet, Oliver Safety Howell, Rick Competition Williams, Pete Newsletter Editor

NEWS AND VIEWS



A Schleicher ASH-25M under power near lake Constance, Germany. This image taken during the 4th Contest of Self-Launching Sailplanes at Stahringen. Image by Peter Wafzig courtesy of web site www.glidingmagazine.com edited by Gillian Bryce-Smith







Clockwise from Top Left Image: The Sinus Motorglider from Pipistrel sold in USA by Robert Mudd <www.pipistrel-usa.com>; Alisport's 13M Silent 2 <info15@alisport.com>; ASA Member Mike Parker accepting the first ASA 500 Award for two distance flights over 500km in 2003. DG-1000 on the convention floor at Atlanta, Oliver Dyer-Bennet, <dgusa@aol.com>; Pete Williams sits in AMS-Flight's 15-meter APIS-M self-launcher. Robert Mudd <apisgliders@aol.com>





President's Message

I just returned from the Atlanta SSA Convention where the weather was a little warmer and the hospitality was very warm. The Convention Committee did a fantastic job of planning and running a very interesting convention, It is always interesting to see the new gliders in particular the motorgliders and motorized sailplanes. The DG's, the Schempp-Hirth's, the Schleicher's, AMS-Flight's Apis-M, Alisport's Silent 2 and new to the field were the gliders from Windward Performance that are planning to, or already are putting motors in their gliders. It was also good to see representatives from Stemme who will be back at next year's convention. I had an opportunity to talk to Richard Van Grunsven of Vans Aircraft and the developer of the R.V. Series of powered kit planes. He said that Vans plans to "test market" a motor glider, in kit form, sometime in the near future. This should be interesting.

The ASA had two very good presentations at the convention: one was by Wilhelm Dirks about the development of the "Noah Sailplane Evacuation System" and the other presentation was by Frederick Weber who talked about the recent events at DG and the proposed take over of the Rolladen-Schneider Sailplanes. He sounded very positive that it was going to happen.

The ASA Breakfast was a highlight of the convention. We honored Wilhelm Dirks for his designing and building the motorized sailplane and we had the opportunity to listen to his presentation on the "History of Motorized Sailplanes." ASA took this opportunity to honor Pete Williams for his work in founding the SLSPA-ASA and publishing the ASA Newsletter. Pete has worked very hard to develop the ASA and to increase our knowledge in the field of motorized sailplanes. He was very kindly referred to as the "Father of Motorized Sailplanes in America" by Wilhelm Dirks. We owe Pete a large debt of gratitude for his efforts. Thanks Pete.

Next year the SSA will return to Ontario, CA, Feb. 10 - 12, 2005 for the Convention. So start planning now because that will be another great convention.

Skip Atwell, President ASA



L-R: Gary Flandro, Oliver Dyer-Bennet, Wilhelm Dirks and Charm Williams listen to K.F. Weber's presentation.

Rick Howell gave a presentation on 2004 soaring activities planned at Alamogordo and Taos New Mexico. He also covered the planned MG Nationals to be held in Fredericksburg, Texas. More details on pages 3 and 5.







L-R: Robert Mudd with his Apis-M; ASA President Skip Atwell presenting a recognition award to Pete Williams; Schempp-Hirth President Tilo Holighaus and the self-launching Ventus 2cxM.



ASA Mission

The Auxiliary-powered Sailplane Association, Inc. was founded in 1988 as a non-profit organization to encourage the design, development and safe use of motorgliders, self-launching and sustainer engine sailplanes.

ASA Membership

Membership in ASA is open to anyone interested in powered sailplanes. Write or call: Brian Utley, ASA Membership Chairman, 9541 Virginia Ave. South Bloomington, MN 55438 Pho: 952-941-5683 EMail: <Utleyb@aol.com> USA Dues: \$20-1 yr, \$38-2 yrs, \$55-3 yrs. International Dues: \$25-1 yr, \$48-2 yrs, \$70-3 yrs.

ASA Officers

APS NEWS Publication

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Browning Ct. Andover, KS 67002 Cell phone 316409-9624 Email: <davemcconeghey@hotmail.com>
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FOR SALE....DG-800B

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