APS *NEWS*

The Official Publication of the Auxiliary-powered Sailplane Association, Inc.

Volume XV Issue # 92 **ASA Web Site:www.motorglider.org** **May-June 2003**

Early morning preparations for a production CARAT's first test flight near the Slovenia factory.

AMS Flight's new CARAT motorglider is now in production and promises to fill a niche in the powered sailplane market not specifically addressed by any other manufacturer. The wedding of a Schempp Hirth 15-meter Discus wing to a streamlined single-pilot all composites fuselage combined with the reliability and the output of a 54hp Sauer SE 1800 four cylinder-four stroke, air cooled engine has resulted in a high performing motorglider that converts into a 35:1 glide ratio sailplane. This transformation is almost immediate once the landing gear is tucked away and the propeller blades automatically fold forward when the engine is secured. Optional winglets for increased gliding performance are available. In the Touring Mode the CARAT can cover up to 547 sm on 12 gal. of 100LL fuel cruising at 10,000ft and 124kts with a fuel reserve of 1/2 hr.

The 320lb payload allows for storage of adequate overnight baggage behind the seat. Climb rate at sea level is a brisk 700fpm at 58kts. Stall speed is 43kts at maximum takeoff weight of 1037lbs. Vne is 135kts. Cockpit comfort and visibility are more than adequate to accommodate larger pilots. The disc brake landing gear is raised quickly with an electro-hydraulic system. The tail wheel is steerable. Trailer stowage is simple using a one-man rigging system.

The USA dealer is AMS/USA, Oliver Dyer-Bennet who advises the delivery time is 8-10 months.The ex-factory price is about 90,000 Euros. This includes all flight instruments, radio, optional winglets and the trailer. For more information contact Oliver at 707-942-5727 Fax: 707-942-0885.

CARAT is produced by AMS-FLIGHT in Ljubljana, Slovenia.

ETA
The Ultimate Open Class Glider

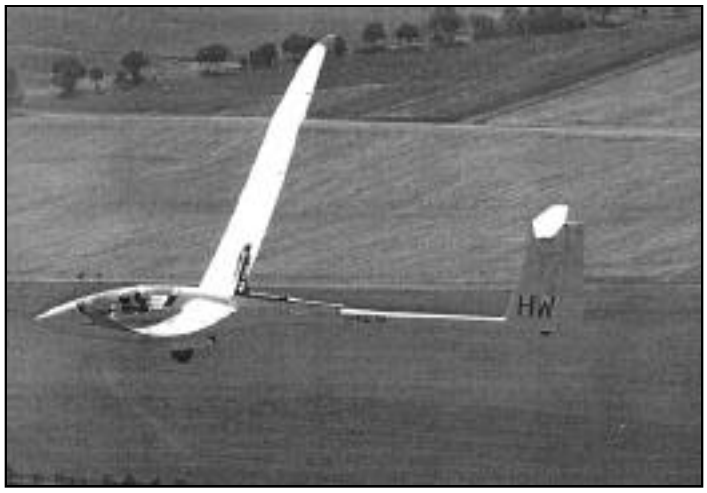
The Greek letter I (eta) means efficiency in the technical world. The eta Project has been under development since 1996 by a group of distinguished German sailplane pilots, aeronautical engineers, fabricators and design firms to design, build, test and evaluate a super high performance self-launching open class sailplane. This project continues today as an ongoing effort exploring the cutting edge of advanced technology in glider aerodynamics, materials, control systems, wing and empanage design. Below is a digest of some of the project manager's words.

The Project

Efficiency is the most important factor for the utilization of energy. For a sailplane efficiency is of utmost importance, to climb in weak thermals and to glide a long distance from the achieved altitude. It was the goal of the project eta to develop and take advantage of all suitable techniques to improve efficiency.Beside the optimization of performance, our attention was directed to eta's handling qualities as well. A very small proportion of the performance increase in level flight was sacrificed for easy circling characteristics Good handling qualities lead directly to improved pilot efficiency. It should be possible for a pilot of average skill to enjoy extraordinarily long cross country flights with eta.

Hans-Werner Gross talks about eta at the 2003 Dayton Convention

The design bureau Flugtechnik & Leichtbau under the direction of Dr. Reiner Kickert at the Research Airport Braunschweig, has been commissioned by the famous contest-winning and record-breaking pilots Erwin Muller, Hans-Werner Grosse, Hartmut Lodes, Dr. Jan Kruger, Bruno Gantenbrink and Umberto Mantica to develop a sailplane of extreme dimensions.



eta PROJECT MILESTONES

1996 Design work begins. Test of the windtunnel model of the main wing profile HQR 1 completed.

1997 A building block test specimen of the wing structure is tested under static loading. Wind tunnel tests of the profile for the outer wing, HQR 2, are completed. The aircraft configuration reaches the state of "design-freeze".

1998 The building block test specimen withstands a fatigue loading equivalent to a flight time of 42,000hrs. One third of this tested time (12,000hrs) can be certified as allowed flight time for eta, the same for normal gliders and motor gliders.

1999 On May, 18th, the static test of the wing was successfully performed. Manufacturing of the eta prototype begins.

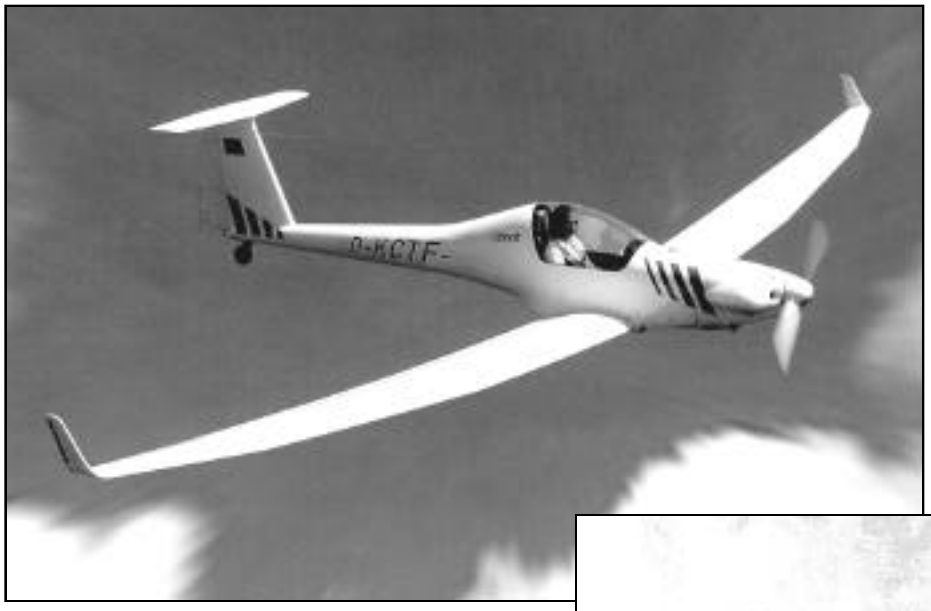
2000 Production of the prototype is finished and the ground vibration tests completed. On July 31st eta made it's maiden flight. The flight tests contunue and there are no problems with the glider and the flight characteristics.

2001 In September the eta prototype is delivered to Hans-Werner Grosse. Hans has flown more than 3,000km. In weak thermals, long straight legs have been flown, so the main design goal has been reached. Total flight time of eta is 80 hours and the handling characteristics are quite good. A new lighter fuselage was been built for the first prototype, reducing the weight about 38kg. Due to this, the first protoype is able to reach the maximum weight mass of 850kg for competition flight in a single-seater. Wing and fueselage for the second (2-place) protoype under construction.

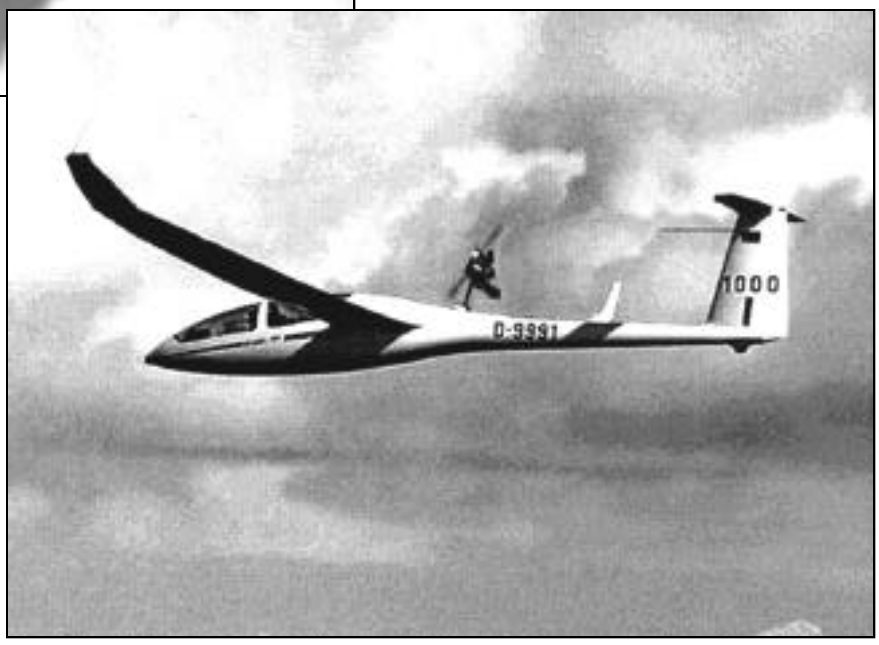
.

Continued on Page 6.....

News and Views



AMS FLIGHT's CARAT in powered flight.



A computer enhancement of DG's 2-place 1000T, the first auxiliary-powered Turbo in the DG line. See Page 4 for the story.

Dean Carswell preparing to self-launch in an Alisport Silent IN. Story on page 7.

The DG-1000T

The Concept

In developing the DG-1000 into a complete product family, introduction of a variant with wing flaps was planned as the next step , together with a self-launching version of the DG-I000M. However, to our surprise, ongoing discussions with prospective customers revealed strong interest in an inexpensive auxiliary engine to allow safe return to home base during a cross country flight. Clubs are particularly interested in this return capability to intensify cross country training without the risk of outlandings. Their established launching capabilities by winch or tow would not justify the higher cost of the self-launch capability. We listened carefully to our customers and changed our planning. Therefore, the next addition to the DG-1000 family will be the DG-1000 Turbo, a variant with an auxiliary engine for return flights.

The Power Plant

We did an extensive market research for existing modern auxiliary power plants. This led us to the power unit of the ultra light glider APIS, developed and currently under test by Martin Wezel of Wezel Flucizeuqtechnik (Wezel Aircraft Technologies). Since this engine allows self-launches of the APIS, we are confident it is well suited to add the return flight capabilities to our two-seater. Therefore we began collaboration between Wezel Flugzeugtechnik and DG Flugzeugbau.

The power plant (right) is a single cylinder two-stroke engine from Goebler-Hirth, with a directly attached 2.5:1 reduction gear (no drive belt). Since the engine is currently certified for ultra lights, we needed to extend this certification. Martin Wezel found a particular interesting solution for the exhaust line, which snakes around the engine pylon. This results in a perfect resonator length, boosting the engine power to approximately 30 HP. The engine drives a large two blade propeller, custom designed for our use. This arrangement provides a much better efficiency than a smaller, fast rotating two blade, or even the smaller five blade propeller. We investigated different solutions, in particular the use of four stroke engines. Two-stroke engines are less optimal than four stroke engines in terms of fuel efficiency and emission characteristics, but in our case is not of significant importance. However, air cooled two-stroke engines excel by unbeatable simplicity because there is no need a coolant or an oil system and the associated two pumps. This also avoids cold-start problems and oil leakage when retracting the engine.

Engine Control

DG has always sought an optimum solution. The DEI in the DG-808B provides outstanding comfortable engine control, contributing to improved safety. In the DG-1000 Turbo we went a step further. The following list itemizes the actions required by the pilot to start the engine:

First Step: Ignition ON

The DEI in the DG-1000 Turbo is always on, even in glider configuration. Therefore, after switching the ignition ON, the following sequence is automatic:

*The fuel pump and the extension spindle actuator start concurrently
*The engine doors open and the engine is extended
*The required fuel valve opens
*When the engine is fully extended, the engine decompression valve is opened
*The primer injects the exact cold-start fuel quantity
*The propeller windmills in the slipstream and the engine fires
*The decompression valve closes and the engine develops full power

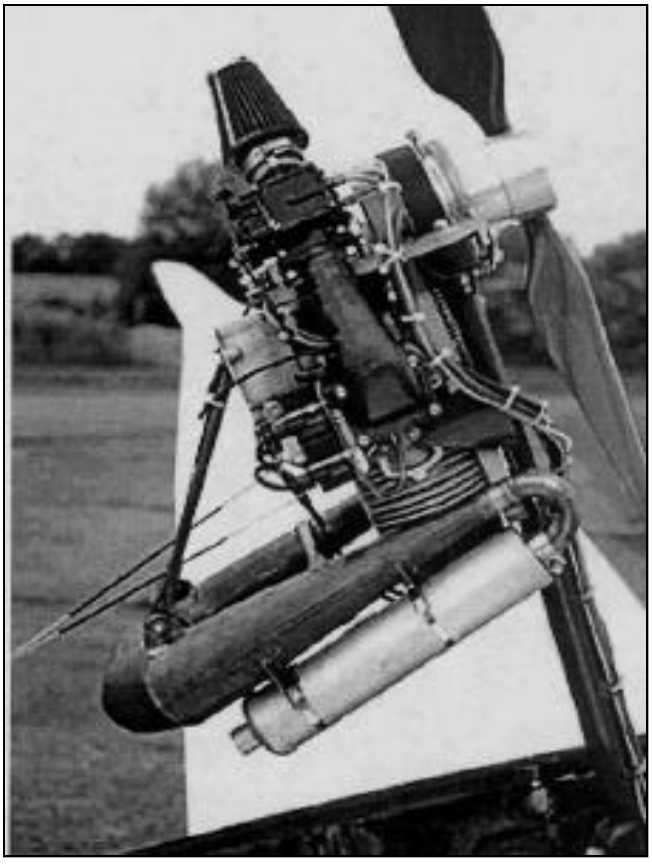
2nd Step:

There is no 2nd step! We call this "On-and-Go", Or can you imagine a better acronym?

Stopping and Retracting the Engine :

Switching the ignition OFF will bring engine and propeller to a full stop resulting in the following:
*The propeller stopper is extended into the propeller plane
*The decompression valve is momentarily opened
*The propeller turns until it reaches the propeller stopper
*The spindle actuator retracts the engine
*The fuel valve closes and the engine compartment doors close
Switching the ignition OFF is the only required action, everything else happens fully automatic. In case of a malfunction there is a manual system to retract the engine without the need for any electronic support. Such a simplified control system is a great convenience for the pilot and is an important safety improvement.

Continued on page 5.....



DG-1000T Continued from Page 4.....

An immediate response of the engine is typically needed at low altitudes, when the pilot is unsuccessful in his search for lift. In this stressful situation any mistake can result in a dangerous situation. Auxiliary engines are usually much less frequently used compared to engines of self-launching gliders. Therefore, the operation of the engine must be as simple as possible.

Usage Spectrum

The DG-1000 is already known for its universal talent for cross country flying, pilot training and aerobatics. However, there are limitations. So it was decided t the DG-1000T will not be certified for aerobatics. At this stage it is unclear if the DG-1000T will be certified with 18m wings. It is possible that the increased weight will affect the landing speed. Such a nice glider is too valuable for local "touch and go" landings.

Development and Testing

1. What speed will start the engine?
2. At what speed will the prop come to a full stop?
3. Do we need a second automated fuel valve (operated by the retraction mechanism) in addition to the mandatory fuel valve in the cockpit?
4. Do we need a primer? Is it possible to realize the On-and-Go system as planned? We will clarify this during development and certification.

Availability, Price and Delivery Positions

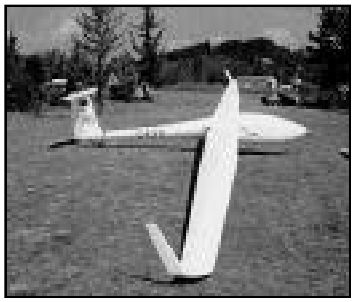
When will it be available? The following can only be an estimate; it is obvious that unexpected problems can affect the timing of such a project. The CAD design will be completed in March 2003. The maiden flight is planned for late summer. Certification of the glider and the engine will be done concurrently in fall or winter. First deliveries will then be in 2004. But please remember, this is the current planning and not an official commitment! Price is yet to be determined. We must first get this "super-ship" into the air! Options may be signed to secure an early delivery date. The option escrow will be refunded in case the development cannot be completed. Please consider also that the first several DG-1000T will need to operate under temporary certification. This may affect delivery possibilities outside of Germany.

English Translation by Manfred Koethe

Editors Notes: This is a digest of DG-1000T information taken from DG's web site. For more information contact Oliver Dyer-Bennet at 707-942-5727 or <www.dg-flugzeugbau.de>

Alamogordo, NM Soaring Camp Announced 1-13 June 2003

The Taos Soaring Camp is Cancelled. At Alamogordo gliders requiring a tow will be limited to 10 ships. No limit on motorgliders. For more details contact Rick Howell at 972-245-0830 or email<PatRickHOWELL@compuserve.com>



DG-800B FOR SALE

Original Owner of 1995 S/N 47 with 18-meter wing; TTAF 1023hrs; 00 time on new SOLO 2625-01; Complete instrumentation. ELT, Filser LX-5000, Cobra Trailer with Solar Panel All TNs; Many spare parts. NDH.Make Offer to <Peter.Breme@t-online.de>

Powered Sailplane Instruction & Delivery

Dave McConeghey ATP CFI motorglider 1507 Browning Ct. Andover, KS 67002 Cell phone 316-409-9624 Email: <davemcconeghey@hotmail.com> Web: <www.angelfire.com/ks2/motorglider>

FOR SALE....DG-800B

1996, 500hrs TTAF, 50hrs TTE. Fully Instrumented with GPS and 02 system. 50hp MidWest Engine. 15 & 18 Meter Wing Tips. Engine and gel coat in excellent condition. Cobra Trailer. $115,000.
Ed Shilen 903-887-9720 (TX)

Ventus Bt FOR SALE

NDH, Cobra, instruments, oxygen, logger, winglets on 16.6 tips, new gelcoat, profiled. 970-898-4453 (CO) <gjk@fc.hp.com>

FOR SALE//PIK-20E

1979 454hrs TTAF Rotax 501 Oxygen
Factory Trailer, Parachute $38,000
303-790-1907 (CO)

FOR SALE // GROB 109A

1983 TTAF 550, NDH, GPS/Com
Ilec Variometer, Transponder
Turn Coordinator, Strobes
$45,000 602-770-9245 (AZ)

FOR SALE...PIK 20EIIF

1985, 280hrs TTAF 60hrs engine Rotax 505; all instruments parachute, oxygen, Factory PIK Trailer, transponder and more. $40,500
Klaus 702-269-6153
klaus760@hotmail.com

2-Place DG-505MB Instruction Available

Oliver Dyer-Bennet of DG-USA has purchased Chuck Rausch's DG-505MB and plans on giving instruction in it this summer at Minden-Tahoe Airport. If interested contact Oliver at DGUSA@aol.com or call 707-942-5727

Continued on Page 6.....

A Survey of AC-5M USA Pilots

APS News mailed surveys to 16 USA Russia AC-5M pilots to determine who they were and how they liked their ships. Only seven pilots responded (44%) so the margin of error is large however the answers showed a reasonable level of reliability. Here are the averages:

Total Hours Logged in the AC-5M-30
Total Pure Sailplane Hrs-600
Total Powered Airplane Hrs- 8,000
Age-63
Occupation-Over 50% are retired.
Only one responder said his ship was for sale.

Responses:

Marginal:
Taxi Operations

Acceptable:
Ground Roll
Lift Off and Climb
Engine Power
Wheel Brake
Fuel System

Good:
Engine Reliability
Russia Trailer
Seating Position
Soaring Performance

Very Good:
Spoilers
Rig/Derig
Ext/Ret. System
Controls Response
Rate of Roll
Engine Controls
Instruments Panel
Cockpit Visibility
Canopy Operation

Outstanding:
Landing Gear Operation

OVERALL RATING-GOOD

The pilots were asked to name three positive and three negative comments about their AC-5M.

Positive included cost, easy to fly, solidly built, easy to rig, excellent workmanship and light on the controls.

Negative included muffler problems, failed kill switch, vibration failures, no steerable tail wheel, needs more fuel capacity, instrument panel not vibration isolated, replacement parts slow to arrive and more power needed for high altitude airfield launches. All in all the responders showed a great respect for Bill Ard's efforts and had a pride of ownership of being part of the Russia Fleet. They liked the little self-launcher.

.....*eta* *Continued from Page 3*

Gliding Performance

The maximum L/D is normally achieved at a speed which has to be flown very exactly. In normal flight operation this is seldom used, so a review of performance has to refer to the whole speed polar. So for eta no precise performance information is given at present. During flight tests the true performance will be evaluated, then a precise, measured polar will be published.In general the biggest gain in performance will be at low speeds. At higher speeds there will be a reduced gain, but it will be significant too.

1 eta PROTOTYPE SPECIFICATIONS

Wingspan	30.90 m	101.38 ft
Length	9.84 m	32.28 ft
MTOW	920 kg	2029.3 lb
Wing area	18.6 sq meters	200.21 sqft
Wing loading	380 - 500 N/m2	7.93-10.44 lb/fi2
Engine	Solo 47 KW	64 HP
Wing airfoils	HQR 3	(fuselage wing intersection)
	HQR 1	main wing area)
	HQR 2	(outer wing)
Fin	HQR 4	
Elevator	HQR 5	

eta information taken from website <www.leichtwerk.de>

MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF THE AUXILIARY-POWERED SAILPLANE ASSOCIATION

January 25, 2003

Pursuant to due notice, the annual meeting of the Board of Directors of the Auxiliary-powered sailplane Association (ASA) was held in Dayton, Ohio. Lloyd Atwell Served as Chairman of the meeting. The directors present waived the reading of the minutes of he previous meeting. Upon motion duly made and seconded the following officers were elected for 2003-04.

President	Lloyd Atwell
Vice President, Contest	Rick Howell
Vice President, Newsletter	Pete Williams
Vice President, Treasurer	Eric Greenwell
Vice President, Membership	Brian Utley
Vice President, Safety	Stan Nelson
Assistant Safety Officer	Oliver Dyer-Bennet
Secretary	John Sullivan

Eric Greenwell, Treasurer, reported a balance of $11,000. Discussed the possibility of advertising. This may be a possibility in the future, but for now we will continue with the free bi-monthly add in Soaring Magazine.We discussed the acceptance by Wilhelm Dirks to attend the 2004 SSA Convention in Atlanta and the possibility of having him speak at the Breakfast meeting. Also noted that this will be the 16th anniversary of ASA, which was started in Atlanta, in 1988. Also discussed the possibility of renting a booth at Atlanta, but it was decided instead, to make and place a 2'X 3' sign in the booth at each sailplane manufacturer, that sells motorgliders in the US. The sign would state that they are an active member of the ASA. Eric Greenwell offered to make the signs. With no further business to come before the board the meeting was adjourned.

/S/ Lloyd Atwell, Acting Secrretary

The Alisport Silent – IN
A New Simple Self-Launcher

by Dean Carswell

"Delightful" - my first word after taxying the Silent in from the runway. Its small wingtip wheels and a steerable tailwheel linked to the rudder make taxying, even long distances at relatively high speeds, very practical. It is one of the group of new 'lite' self-launched single-place sailplanes now becoming available. The Silent, as befits its small size, sits low to the ground and is easy to climb into. The roomy cockpit has a fixed seat position fitted with a 4-point harness and ground-adjustable rudder pedals. As equipped, minimum cockpit weight was 167 lb, with a maximum allowable of 230 lb.

The engine erection process is completely automatic, confirmed by the illumination of a green light. Engine ignition is prevented until this happens. The engine is started with throttle closed, by turning on the ignition switch (which activates the fuel pump and FADEC), then pressing the starter button. Engine start is immediate, with idling at 1,800 – 2,000 rpm. There is no other engine gauge, the FADEC allowing progressively higher power settings as the engine warms up, and reducing power if overheating or over-revved. The only fuel indication in flight is a red warning light which illuminates when the quantity falls to 1.4 gal.

After a couple of minutes the engine is warm enough to taxi.
Tailwheel steering is positive and instantaneous without any backlash. At normal taxying speed, the tailwheel stays firmly on the ground, although the wings may be leveled to reduce drag on the wingtip wheel. Prior to takeoff, the single ignition engine is run up to full power (a little over 6,000 rpm) which is easily held by the wheel brake, activated by the airbrake lever. Other checks are standard glider procedure. For takeoff, the throttle is opened to full power, as the nose pitches down onto the nosewheel. Acceleration is swift with no tendency to swing. The full-span flaperons give immediate lateral control, and there is no sign of excessive pitch sensitivity. The ship is responsive, but not twitchy. Takeoff roll is short – the flight manual quotes 400 ft on asphalt and 600 ft for grass. Best climb seemed to be about 43 kt (yellow Δ speed) and the nose must be raised fairly quickly to keep the airspeed at this value. During climb, the high nose attitude causes a large blind spot necessitating a gentle weave to clear the area ahead.

The climb rate is good! As the engine was not yet fully broken in, I was requested to reduce power after the first few hundred feet. A timed climb to 3,000 ft (the first 1,000 ft with full power (6,200 rpm) and the rest at 5,850 rpm) was achieved in almost exactly 10 minutes.
Engine noise level is high but use of ear defenders made it quite unobtrusive. There is a definite 'beat' to the sound, perhaps from the single bladed propeller. At a safe altitude under climb power, the Silent stalled around 35 kt at a very high nose attitude after some gentle tailplane buffet. Recovery was immediate upon lowering the nose. In the event of power loss during the climb the nose needs to be quickly lowered to a safe attitude to avoid stalling.

Maintaining 5,850 rpm, I lowered the nose to stabilize the ship in level flight which resulted in speed of around 60 kt. (engine-on operation is restricted to 73 kt). Engine shutdown and retraction needs careful sequencing, accomplished in my case with about 200 ft height loss – with practice this could be reduced to around half that value. Air restarting is simple and quick. In free flight with engine stowed, the Silent handles like any well-bred sailplane.

Control harmonization is pleasant and due to the full span flaperons, the roll rate is very good. As in most gliders, adverse yaw is significant, but there is sufficient rudder authority to remain coordinated at maximum aileron deflection.

The stall clean occurred at a slightly slower speed, and with a slight wing drop. Recovery is immediate when the nose is lowered. Spinning and aerobatics are prohibited. At aft CG, I found the spring trim effective and easy to operate, but only up to around 50 kt; I understand it can be adjusted to provide more nose-down authority. Cockpit visibility and ventilation is good and the noise level was relatively low.

The ship thermals very pleasantly – in the weak fall conditions I encountered, best rate of climb was at 38-39 kt. It sat nicely in the groove, mostly hands-off at 30 to 40 degrees of bank. The brochure quotes a minimum sink rate of 138 fpm. It also gives a best L/D of 31 at 43 kt. 'Normal' operation seemed best with the flaps set at the 0° take off/climb setting, which has a permitted maximum speed of 86 kt. Redline with flaps at –7° is 108 kt. Looking at the polar curve, using the cruise (-7°) flap setting appears to get a slightly better best L/D at 10 kt higher with a wing loading of 5.75 lb/sq.ft.

I tested the single-element top surface Schempp Hirth airbrakes. Opening resulted in a nose-down pitch movement; this can easily be avoided by maintaining the nose attitude constant relative to the horizon, which seemed to cause little airspeed reduction. Closing the airbrakes had a similar pitch up effect, again easily controlled. On approach, the airbrakes proved to be moderately effective. Descent rate can be quickly increased by slipping. At approach speed and airbrakes out, there is a good view ahead over the nose. On touchdown, the steerable tailwheel gives excellent directional control. Alisport has announced the development of an additional model of the Silent – IN with a new 42.65 ft/13 m span carbon fiber elliptical wing. This is an exciting improvement with an increased aspect ratio of 19.2 (12 m version 14.0), and a reduced wing area of 94.7 sq.ft. (110.9 sq.ft) resulting in an increased wing loading of 6.96 lb/sq.ft. giving a calculated L/D max. of 39 . Production is scheduled to begin in the second half of 2003. More details can be found at www.alisport.com. My thanks to Leo Benetti-Longhini, Alisport's North American Representative, for allowing me to evaluate his Silent - IN.

Editor's Notes: Dean's article about the IN flight can be seen in the May 03 SOARING. This is a digest of his article relating to a pilot's impressions. The July-August 2002 Issue of APS NEWS has detailed specifications. Dean Carswell is a long-time instructor, the SSA's Chief Master Instructor and former President of the Auxiliary-powered Sailplane Association. He has over 2,900 hours glider flight time, holds a Gold badge with 2 diamonds, and has flown over 130 different makes and models of gliders.

ASA Mission

The **A**uxiliary-powered **S**ailplane **A**ssociation, 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

President: Lloyd Atwell 262-348-9488
Acting Secretary....Dean Carswell 972-775-1853
Treasurer: Eric Greenwell.....509-943-9065
Membership: Brian Utley.....942-941-5683
Safety: Stan Nelson.....505-776-5080
Asst.Safety: Oliver Dyer-Bennet..702-942-5727
Publications: Pete Williams.....775-265-3877
Competition: Rick Howell.....972-245-0830

APS NEWS Publication

Contributors please submit copy and materials to:
Pete Williams, Editor, APS NEWS, 1033 Dresslerville, Rd. Gardnerville, NV 89460 USA Pho: 775-265-3877 Fax: 775-265-6179
email: sls0526@pyramid.net

Editorial Policy

APS NEWS material is freely contributed by members. The accuracy of the data and validity of opinions expressed are the responsibility of the contributors. Other publications may publish material printed herein, however a credit is requested. Manuscripts accepted for publication are subject to editing necessary within the confines of space available. APS NEWS is not responsible for lost or damaged artwork, photos & manuscripts.

Liability Statement

APS NEWS has made every effort to ensure the correctness and completeness of the printing and or publication of the material in the issues. APS NEWS has not investigated and makes no representations as to the accuracy or completeness of any information presented herein.

APS NEWS Publishing Information.....

Pete Williams, ASA Publications Manager, is the Editor, and Print Production Manager. The APS NEWS is printed in Minden, Nevada and mailed First Class. Contributors can mail hardcopy text or use Email. Text may be edited as required to fit the newsletter. Photos are always welcome. APS NEWS is delivered to the printer the last week in Jan; Mar; May; July; Sept & Nov. ASA desires input on what the members want in APS NEWS and we are doing all we can to keep it informative and interesting. ***It's your publication, so please let us hear from you!***

CLASSIFIED ADVERTISING RATES
50 cents/word, Prepaid for 2 Insertions Minimum.Non Refundable.
Contact Pete Williams for Display Ad sizes and rates.
APS NEWS is published Jan/Feb; Mar/Apr;May/June; July/Aug; Sept/Oct; Nov/Dec

PRINTED IN THE U.S.A.

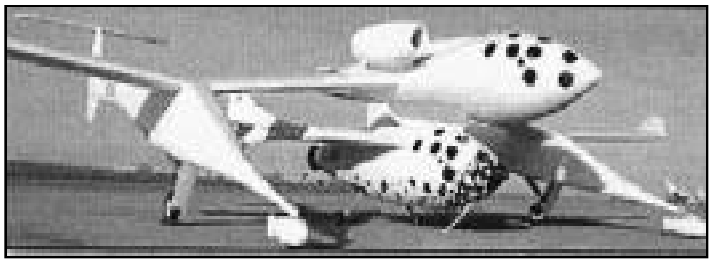
ASA is a Division of the Soaring Society of America

ASA NEWSGROUP ANNOUNCED

To access it, point your newsreader (such as Outlook Express) at the SSA server: news.ssa.org Then subscribe to the group: ssa.auxiliary.powered.sailplane.association
The newsgroup can also be accessed from the Web with a standard browser, by going to http://www.ssa.org/newsgroup.asp or reaching it from the SSA home page (www.ssa.org), then clicking on "Newsgroup" under "What the SSA is" on the sidebar on the left. I hope this will lead to more communication among the ASA members.
Submitted by Eric Greenwell

Turn Point Safety

Almost every glider pilot now has a flight director coupled with a logger for cross-country, local, record or competition flights. It has become the norm nowadays. So what does this have to do with safety? Plenty because the pilot's eyes are concentrating on the flight director track curser approaching a turn point. This occurs normally during the last few miles when approaching the turn. If other pilots are nearby in the area or are using the same turn point there is a distinct possibility of a near miss or midair collision. Gone are the days of visual contact with turn point ground features and positioning the glider for a photograph within the correct sector. Multiple start and finish gate cylinders used in contest flying alleviate the problem somewhat but the danger is still there. In addition to heads up flying pilots would be wise to broadcast at least 2 minutes ahead of the turnpoint their position and altitude. This will most likely not be done during competitive events so the need for heads up flying in and around turn points becomes more important than ever. High Tech navigation devices do not remove the danger of midair encounters. If anything, the danger is increased. *Submitted by Pete Williams*



SpaceShip One Demonstrated at Mojave Airport

On April 18, 2003 Burt Rutan unveiled a privately built space launch system consisting of a jet powered launch vehicle called White Knight (above) and a three-man rocket-powered spacecraft called SpaceShip One (below). Both of the vehicles are recovered using a low speed glider style spiral landing manuever. At this demonstration the White Knight launching vehicle climbed steeply to 6,000ft and spiraled down to an extremely soft landing. <www.scaled.com>

ASA DECAL ENCLOSED

THIS WHITE VINYL DECAL HAS A WEATHER- PROOF LAMINATE AND CAN BE AFFIXED TO ANY OUTSIDE SURFACE. ADDITIONAL DECALS ARE AVAILABLE FOR $1 EACH. CONTACT PETE WILLIAMS.