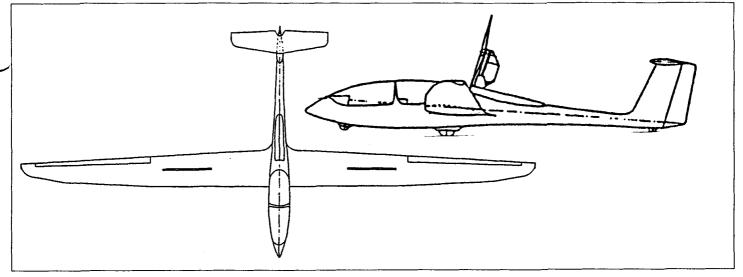
Grob 103 C Twin III SL Self-Launching Sailplane



The 103 SL is a two-seater powered sailplane with a 43hp aircooled Rotax 505A 2-cycle engine turning 6,800 rpm at Max power. It is offered with a 2-pitch controllable prop or a special fixed pitch Climb prop by Technoflug (Dia 5.18ft). The engine is fitted with dual carbs and ignition. The 18 meter wing has a triple leading edge taper with an Eppler E 583 airfoil. Empty weight is 1,080 lbs and Max flying weight is 1,565 lbs at a wing loading of 8.3 lbs/sq. ft. Engine extraction and retraction is semi-automatic. Takeoff and Climb Performance at 1,565 lbs, sea level standard conditions: no wind, hard, level & dry surface: Ground roll 1,000ft.; Distance to 50' height-1,640'; Climb Rate-about 300 fpm. Approximate Cost including full instruments, trailer and shipping-\$120,000. For more details contact Mike Shade. Grob Systems, Inc. At 419-358-9015 (OH)

Self-Launching Sailplane Pilot's Assn. NEWSLETTER

MARCH ~ APRIL 1994

Published Bi-Monthly by SLSPA, Inc • Pete Williams, President and Editor • Bruce Templeton, Vice President • Issue #37 Vol. VI

SSA/94 Convention-Chicago...

SLSPA Breakfast-

Fifty pilots attended the breakfast. Bud Schurmeier presented the latest rules changes for Auxiliary-Powered Sailplanes participating in 1994 FAI Regionals and Sports Class Nationals. Tows are still required, however engines will not be disabled but required to have a frangible seal on engine doors or prop. If such seal is broken, the pilot is scored to last properly photographed turnpoint, using engine baro marking equipment. A baro capable of showing engine run is still required. Selfretrieve is permitted if the craft lands out. (See Rules Massaged in this newsletter.)

Officers

Registrations at Chicago exceeded 570.

1994 SLSPA Board and Officers-

(Thanks Jerry for your help over the years!)

Board Members

Chairman	Pete Williams	Pres.
Member	Bruce Templeton	VP/Secy
Member	Don Hurd	•
Member (new)	Steele Lipe	Treas.
Member		Safety Chair
	John Schmidt	Safety
	Brian Utley	Membership Chair
	Bud Schurmeier	Rules Chair
Ret. Board Membe	rJerry Wenger	

John Schmidt and Stan Nelson will be working on a Safety Seminar for the Reno convention. Brian Utley stepped forward to maintain the SLSPA membership database including the roster of members and mailing labels. For all of this help, your editor is grateful. Pete Williams announced he will step down as Pres. of SLSPA effective 4 March, 1995 at the SSA Convention in Reno. According to Pete "SLSPA has come of age with over 300 members. Seven years service is a completed number and the membership has adequate talent to pick from".

Rules Massaged...

For the past two years SLSPA has been working to obtain a seat on the SSA Rules committee to provide input on Auxiliary Powered sailplane participation in FAI Regionals and Sports Class Nationals. In the past, rules for these FAI competitive events were established by the SSA Rules Committee with little prior input from SLSPA. As a result there has been confusion as to the definition of a powered sailplane and how it would compete. For 1994, the Rules Committee decided (in Dec. 93 meeting) that the powered sailplane could compete if it was flown like a pure glider without the engine being disabled. A tow would be required and a frangible sealing device placed on

At the request of Pete Williams, John Good, SSA Contest Board Chairman, placed our request for an SLSPA Rep. Seat on

continued to page 2

continued from front page

the Rules Committee on the agenda at the SSA Board Meeting at Chicago. It was voted down, however, Good was instructed by the SSA Board to establish communication with SLSPA to assure timely input on rules matters regarding powered sailplanes. This is where the matter stands now. Pete Williams and Bud Schurmeier are now working with John Good to clarify key issues.

The original objective for allowing MGs to fly in Regionals was to expand the participation of powered ships in competitive Regional and Sports Class Nationals events. If any SLSPA Member has comments on the above, please send them to:

Bud Schurmeier 6552 Indian Hill Way. Fallbrook, CA 92028 619-941-3703 and copy:

John Good 75 Grady Ave. Salem, NH 03079. 603-894-6506 FAX 603-894-6507.

Your input is valuable and timely. Also we encourage all competitive members to fly in a 1994 Regional Contest and provide feedback to the above people on how things went.

See 1994 Calendar

All of the above has nothing to do with the rules governing the annual Auxiliary-Powered Contest where the powered ships fly as a class.

New Developments...

Schempp-Hirth:

Ventus 2:

A 15/18 meter ship offered as pure sailplane, or with 26 hp. SOLO engine or "buried" liquid cooled Rotax 463 (about 50 hp). First flight of pure ship scheduled for April 1, 1994. Nimbus 4DM:

First flight scheduled for mid-April. Will have "buried" liquid-cooled Rotax 535C @ 59 hp. New wide blade prop with very low noise. 26.5 meter (86.94') wing. Max TOW: 1,764 lb. S/L Std Conditions; climb rate-550 fpm. Karl Abhau expects to base his Nimbus 4DM at Minden in the summer of 1995.

Discus BT:

Self-launching version with option of Solo engine or buried Rotax 463. Climb performance is 660 fpm with Rotax engine. *Ed. Note:* It appears S/H is moving toward the non-exposed liquid cooled engine with several versions available:

Schempp-Hirth Sailplane Line:

1=Discus, 2=Ventus 2, 3=Nimbus 4, 4=Nimbus 4D

1 2 10 0 00, 2 1 0 11 10 0 2, 5	11111045 1, 1 11111045 115	
Pure sailplane	(no engine) 1,2	2,3,4
Turbo sustainer	(exposed 21 HP SOLO) 1,2	2
Turbo sustainer	(exposed 24 HP ROTAX)	3,4
Limited self-launcher	(exposed 26 HP SOLO) 1,3	2
Self-launch	(buried 48 HP ROTAX) 1,3	2
self-launch	(exposed 43 HP ROTAX)	3
Self-launch	(buried 59 HP ROTAX)	4

Glaser-Dirks

The new **DG-800** was on display at Chicago. Changes include a new wing and tail. All control hookups are automatic. The 43 hp air cooled ROTAX 505A engine has a noise attenuation shroud and a new low noise MT prop. Three are now delivered to Al Martini (CA), Jake Van Dyke (MO) and Ken Seymour (WA). David Volkmann expects his DG-800 in May.

Wilhelm Dirks announced the **DG-800B** which will be powered by a buried 50 hp 2-stroke liquid cooled engine made in England by Mid-West Aero Engine. The engine is currently being static tested at Glaser-Dirks and the prototype is expected to fly later this year with deliveries beginning in early 1995. Dirks claims 10-20% better takeoff and climb performance due to less drag. Glaser-Dirks Motorized Sailplane Line:

DG-600M 15/18 Meter Limited S/L 24hp Rotax

DG-800 18 Meter Class S/L 43hp Rotax

DG-800B 18 Meter Class S/L 50hp MWAE

DG-500M 22 Meter Open Class S/L 60hp Rotax (2-place)

Schleicher:

Rudy Mozer's new ASH-26E was at Chicago as was Gerhard Waibel. The Wankel engine installation is very compact. Some deliveries are being delayed as wing molds are being reworked to lower wing panel weight.

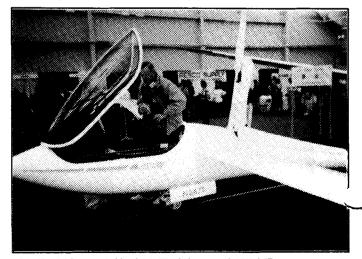
Schleicher Motorized Sailplane Line:

ASW-24E: 15 Meter Standard Class S/L -24hp Rotax ASW-22BE

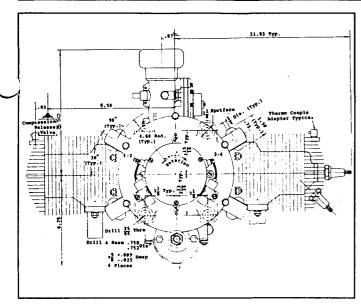
& BLE:25/26.5 Meter Open Class S/L-43hp Rotax ASH 25E (2-pl)..25 Meter Open Class-Sustainer-24hp Rotax ASH 26E18 Meter Class-S/L-50hp Wankel

PIK20E Electrical Problem...

Bob Moore reports that his early Finnish-built PIK20E (which has accumulated or 1900 hrs. TT and 200 hrs. Engine time) experienced some perplexing intermittent electrical problems this past season, Affected where all of the engine instruments, the gas gauge, and sometimes the ability to start, The problems were eventually traced to broken ground wires near the base of the engine pylon, Each time the engine is raised or lowered htese flex, and they had work hardened and failed beneath the insulation. Sometimes they would make contact and sometimes not. In addition, a spade connector on a large cable in the same vicinity had become disconnected, although encased in "shrinktite". Any PIK owner having similar problems should suspect this as a possible cause and inspect. (Continuity checks alone may not be adequate since such factors as vibration, whether the engine is up or down, temperature, etc. may cause continuity to be made or broken.)



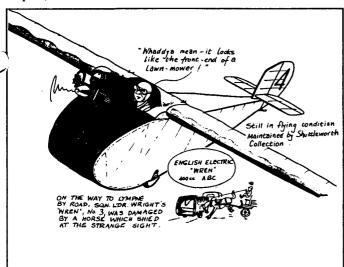
Al Leffler looks over Schleicher's Wankel-powered ASH-26E at the SSA Chicago Convention



NELSON ENGINE TO GO INTO PRODUCTION...

The Model H-63-CP is an FAA Certified 4-cylinder, 2-cycle engine producing 48hp at 4,400 rpm. Its dry weight is 68 lbs. Dimensions are 15"H X 24" W X 20" L. For more details write or call:

Charles Rhoades, Sport Plane Products, Inc. 420 Harbour Dr. Naples, FL 33940 813-263-1670



MOTOR GLIDER COMPETITION for single-seat aeroplanes LYMPNE, OCTOBER 1923

PRIZES FOR BEST FUEL CONSUMPTION, SPEED AND HEIGHT Engine capacity limited to 750 c.c.

All machines had to pass through a 10ft-wide gateway with wings folded or detached

Reproduced from "Aeroplane" and submitted by Harry Miltner

SLSPA Logo Sew-on Patches Available...

Red, White and Blue patches are available from SLSPA to sew on hats and jackets. See enclosed price list.



1994 Calendar

April 3-8Region 5 North, Chester, SC Eric Mozer 704-588-6600	
April 19-28Aux-Pwrd Nationals/Winterhaven FL	
Don Pollard 813-956-9113	
May 29-	
June 4Regional 6 South, Waynesville, OH	
Linda Schieman 513-897-7566 (eves)	
May 29-	
June 4Region 4 North, Fairfield, PA	
Chris O'Callaghan 301-696-9159	
May 28-30	
June 4-5Region 11/Crazy Creek Gliderport CA	
Jim Indebro 707-987-9112	
June 6-10Air Sailing Racing Camp. Air Sailing NV	
Carl Herold 702-786-8505	
June 6-10Region 5 South, Cordele, GA	
Clyde Taylor 404-765-3180	
June 12-18Air Sailing Sports Class Contest	
Air Sailing, NV Eldon Hinkle 916-894-715	1
June 20-25Region 9 Hobbs, NM	
Doris Miller 505-392-7412	
June 20-25Region 7, Lawrenceville, IL	
Dennis Harmon 812-886-5653	
June 21-30Std. Class Nats Warren CT	
Ed Crawley 617-253-7510	
July 3-16High Country Safari, Minden NV	
Tom Stowers 702-782-4944	
July 12-21Sports Class Nats Siskiyou, CA	
Gary Kemp 916-934-2482	
July 26-Aug 415 Meter Nats, Livingston, MT	
Debbie Alke 406-444-2506	
(limited to 48 contestants)	
Aug 9-18Open Class Nats Uvalde, TX	
Mark Huffstutler 512-278-4481	
Aug 14-20Region 6 North, Ionia, MI	
John Benz 616-642-9019 (eves)	
Aug 20Fallon Trophy Dash Air Sailing NV	
Alex Burnette 702-423-4343	
Aug 27-28	
Sep 3-5Region 12 California City, CA	
James Norris 805-968-7778	

FOR SALE:

with Rotax 501 and PIK-20E Manual Engine Retraction System. Engine has fresh overhaul at 93 hrs. TTA/F-832 hrs. Tinted Canopy. Tera, Cambridge, Winter Vario, Disc Brake, Steerable Tailwheel with Wing Tip Wheels. Pfeiffer Trailer. Licensed "Experimental"... all at 1/2 the price of a new DG-800 Engineered for dependability by Harry Miltner 509-925-6214 (WA)

Very Low Time, Custom Climb Prop, Auto Engine Extend-Retract, Radio, High Altitude 02 System, Transponder, Both cockpits have complete instrumentation, Cobra Trailer, Many Spares, Minden based, Available 1 May 1994. \$110,000 Karl Abhau or Pete Williams 702-265-3877 (NV)

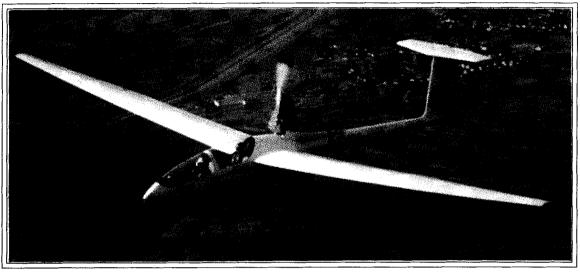
Wentus CM 1990 Model. 220 Hrs TT, S-Nav, Dittel Radio, Cobra Trailer. This ship is like new with many factory options. Roger Buchanan 813-784-5421 (FL)



Glaser-Dirks Flugzeugbau, GmbH

Im Schollengarten 19-20 • D-76646 Bruchsal 4 Germany Postfach 4120 • D-76625 Bruchsal Germany Telephone: 07257/8910 Telefax: 07257/8922

*D&-588*M



THE ULTIMATE TWO-PLACE HIGH PERFORMANCE SELF-LAUNCHING SAILPLANE

PROVEN CONCEPT: The basic design concept behind all Glaser-Dirks self-launching sailplanes is to design the sailplane from the drawing board up as a motorized high performance ship, complete with a fuel system, an electrical system and a motor erection system that are not add-ons but integral parts of the sailplane. The DG-500M represents over 12 years experience in this specialized type of sailplane design and construction. Today, Glaser-Dirks leads the world in the production of retractable engine motorized sailplanes with 290 DG-400s: 53 DG-600Ms: 20 DG-800s and 50 DG-500Ms produced since 1982. A world record total of 413 motorized sailplanes! With this background of experience, it is little wonder that Glaser-Dirks motorized sailplanes have established the industry standards for performance combined with ease of handling, safety and reliability plus high demand on resale.

A two-place evolution of the famous DG-400, the **DG-500M** incorporates a host of new design features that make it one of the most advanced tandem self-launchers in the world. To the pilot, this means TOTAL FREEDOM for unassisted ground operations for taxi and takeoff. The tried

1 proven liquid cooled Rotax 535C produces in (44kw) at sea level with adequate power for launches at most higher altitude fields.

ADVANCED DESIGN: The **DG-500M** is the starship of the Glaser-Dirks self-launching line. With the DG-400's famous safety cockpit, the ship has unexcelled comfort and pilot visibility. Both cockpits are roomy and ergonomically functional with adjustable rudder pedals and seat back.

A complete set of dual controls makes the 500M an excellent trainer for basic airwork as well as high performance cross-country and competition flights.

SOARING PERFORMANCE: The **DG-500M** delivers outstanding performance in all areas. For a typical flight with two pilots and full fuel, takeoff distance over a 50' obstacle is 1,300 ft. at a takeoff weight of 1,650 lbs. [750 kg.]. At 1,650 lbs., the climb rate at sea level is 520 fpm. The gliding performance is over 47:1.

The **DG-500M** has an advanced 22 meter wing with a Wortmann FX 73 wing profile. This wing has been extensively wind tunnel tested and has demonstrated a very low sensitivity to rain and insect strikes. The advantage of this wing profile is that it can be effectively thermalled in low lift conditions and yet retains excellent penetration and a remarkably low sink rate of 100 fpm at speeds between 40 and 50 KIAS. At 80 KIAS the sink rate is only 200 fpm. The result is a ship capable of extended cross-country flights at speeds normally attainable with a longer span.

NOISE REDUCTION, SAFETY AND RELIABILITY: Engine and propeller noise is significantly reduced by using 3:1 belt reduction and a special propeller design.

The DG-500M is a balanced and stable soaring platform. The mixing of flaps and ailerons for roll control plus the large vertical fin reduces adverse yaw providing light and well harmonized control forces. Pilots like the crisp roll rate and the ease of elevator trimming using the lever located on the control stick (45 degrees left bank to 45 right in 4-5 sec.). The double shell safety cockpit is an industry first and plays an important role in pilot protection by absorbing high energy forces in the event of a crash landing. All control hookups are fully automatic. Wing construction is full carbonfiber. The fuselage is glasfiber-carbonfiber. These advanced composite structural materials provide a high measure of flight safety, ruggedness, airframe longevity and low weight.

Modifications and improvements incorporated in the 2-cycle Rotax engines over the past 12 years have made the Rotax powerplant one of the most reliable self-launching engines on the market today. This tried and proven power-plant experience is incorporated in the **DG-500M's** powerful liquid cooled Rotax 535C.

THE GLASER-DIRKS DG-500M TWO-PLACE SELF-LAUNCHING SAILPLANE

FOR TRAINING, COMPETITION, RECORDS, CROSS COUNTRY OR JUST SOARING FOR PURE ENJOYMENT...

NOTHING ELSE EVEN COMES CLOSE!

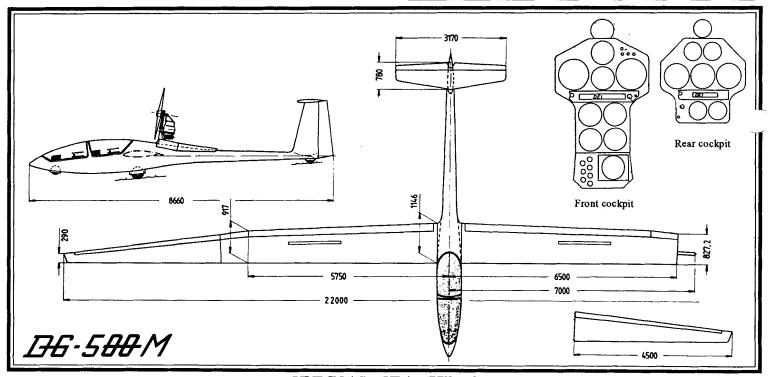
DG-588 M

SPECIFICATIONS			
	Metric	U.S. Equivalents	
Fuselage Length	8.66m	28.4 ft	
Wing Span	22m	72.2 ft	
Wing Area	18.29 m2	196.9 sq ft	
Wing Aspect Ratio	26.5	26.5	
Empty Weight	540 kg	1,190 lbs	
Max Takeoff Weight	825 kg	1,819 lbs	
Wing Loading/85 kg payload	34 kg/m2	7.0 lbs/ft2	
Waterballast, Wings (Std)*	100 liters	26.3 gal	
Fuel Capacity (Fuse Tank)	38 liters	10.0 gal	
Fuel Capacity (Wing Tanks)*	40 liters	10.6 gal	
*Optional			

All specifications and performance figures based on factory calculations using standard day,
standard atmosphere, sea level, gross weight conditions unless otherwise noted.

PERFORMANCE			
VNE	<u>Metric</u> 270km/h	<u>U.S. Equivalents</u> 146 kts	
Stall Speed	68 km/h	36 kts	
(730 kg/1,609 lbs.)		7	
Takeoff Ground Roll	247m	811ft	
(750kg/1,650 lbs.) Takeoff Distance			
over 15m/50ft obstacle	399m	1,300ft	
(750kg/1,650 lbs.)			
Climb Rate	2.6m/s	520 fpm	
(750kg/1,650 lbs.) Best Glide Ratio-over 47:1	110 km/h	59 kts	
Minimum Sink	.51 m/s	100 fpm	
(640 kg/1,141 lbs)	@ 80kmh	@ 43 KIAS	

POWER PLANT			
Metric U.S. Equivalents			
Powerplant type/output: 2 cylinder, liquid-cooled,	monto	O.O. IXIUIVAIGIIIS	
dual ignition ROTAX 535C			
2-stroke engine	44 KW	60 h p	
Propeller: Wood and fiberglass			
MT 158R 125-1A	1.58m	5.18ft	



SPECIAL FEATURES

- · Automatic Electronic Fuel Injection for Engine Choke on starting.
- Digital Electronic Indicator (DEI) in both Cockpits for readout of RPM/BATTERY/ FUEL/CYLINDER HEAD TEMP/ENGINE POSITION/PROP POSITION/GEN-ERATOR.
- Automatic Engine Extraction/Retraction/Prop Braking and Positioning.
- Steerable Nosewheel and Wing Tip Wheels with Large Spring Damped Main Wheel with Disc Brake.
- Excellent visibility, especially to the rear, for both pilots with height adjustable rear seat.
- 2-Piece Canopies with Emergency Releases, Demist and Individual Directional Air Vents.
- 4-Piece Wing Parted at Center of Half-Span Reduces weight of Inboard Panels for Easy Two-Person Rigging. Removing the wing tips allows for easy hangaring reducing the span to 14 meters (46 ft).
- Completely Automatic Hookup of All Flight Controls.
- U.S. FAA Type Certificate No. G59EU issued on July 8, 1992 per F.A.R. 21.29.

1994 DELIVERY POSITIONS AVAILABLE!

Increased production rate has made a few 1994 delivery positions available. Contact your local DG Dealer or the Factory today for prices and reserve your early delivery postion!