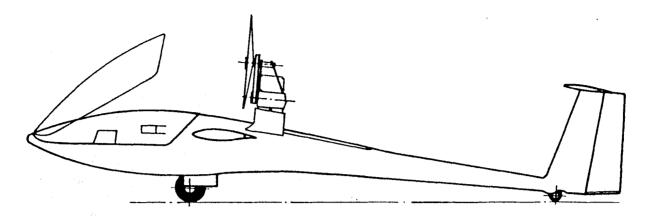
# Glaser-Dirks DG-400 Self Launching Sailplane



The DG-400 is a 15 meter (17 meter tips) sailplane first produced in 1983. Over 300 DG-400s have since been delivered. The wings, flaps and ailerons are carbonfiber reinforced plastic. It is powered by a Rotax 505 engine producing 43 hp at sealevel, standard conditions. Belt reduction is 2:1. Soaring performance is 45:1 in the 17 meter mode. Maximum weight is 1058/1014 lbs in the 15/17 meter configurations. Typical wing loading (17M) is 8.8 lbs/sq. ft. Thermal climb performance in the 17 meter mode is excellent and the 400 has the ability to stay aloft even in the light thermals with the long tips. Takeoff and climb performance at 49 Kts is over 700 fpm at sealevel. The 400 still holds many single place motorglider world records most of which were set in South Africa in the late eighties. Current ex-factory price is about 125,000 DM. The U.S. fleet is about 40 aircraft.

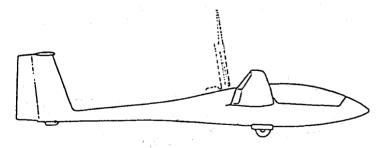
# Self-Launching Sailplane Pilot's Assn.

# NEWSLETTER

MAY~ JUNE 1993

Published Bi-Monthly by SLSPA, Inc • Pete Williams, President and Editor • Bruce Templeton, Vice President • Issue #32 Vol. V

#### Rollanden-Schneider Announces Self-Launcher...



This new 18 meter self-launching sailplane will fly in the autumn of 1993 according to a late news release. The engine will remain in the fuselage and incorporate a relatively low rpm propeller. The current LS-6 fuselage is being modified to accommodate the liquid cooled powerplant (engine type and model yet to be specified). A larger main wheel will be fitted and the four-piece wing, rigging and trailer will be almost identical to the sailplane version. Derived from the 17.5 meter LS-6c, the pure sailplane version is expected to become available in the Fall of 1993 and the motorized version in the Spring of 1994. Performance figures not available at this writing.

Ed Note: Expect the engine to be the new liquid-cooled Rotax 463 now completing Austrian Aviation Authority

certification under JAR 22. For more information contact PIK-Pacific. Mike Adams at 310-376-4590 (CA).

## GPS Update...

The USAF deployed 11 new GPS satellites in 1992. Three more satellite launches are planned for 1993. The full GPS system is expected to be operational later his year for a total constellation of 24 in orbit.

# Rotax Engine Overhaul Update...

Per Kodiak Research, Ltd. Ltr. 5-7-93:

Rotax Technical Bulletin 505-07 has been issued (preliminary) and provides actions to be taken to overhaul engines to JAR 22 certification. Affected engines are 275, 535, 505 and 505A. As of Jan. 1992 Operators Manual 2nd Issue, Rotax has changed the overhaul interval from 300 hours to 300 hours or 6 years whichever occurs first. 501, 505 and 505A engine serial numbers and year to be overhauled as per Mar/Apr 93 newsletter. To date no JAR 22 approved engine U.S. O/H facilities are designated by Rotax.

continued to page 2

IF THIS NEWSLETTER CONTAINS A YELLOW MEMBERSHIP RENEWAL SLIP—YOU HAVE YET TO RENEW FOR 93-94. PLEASE DO SO OR THIS WILL BE YOUR LAST NEWSLETTER. THANKS!

# Rotax Engine Overhaul Update...

continued from front

O/H Costs:

JAR 22 Certified Engines...\$2,750\* F.B.O. Ft. Lauderdale, FL Rotax Facility for factory O/H at Rotax Austria factory.

Non JAR 22 Certified Engines...\$1,500\* at one of Rotax authorized U.S. service centers. See Mar/Apr 1992 newsletter for listing of these centers.

Freight, engine removal/installation and crating costs must also be considered.

\*Ed. Note: These are approximate costs depending on parts to be replaced. I am advised by Bob Marshall (USA Rotax Dist.) that most likely the main crankshaft, pistons, rings, all bearing and seals will be replaced, Pilots should check their airframe and engine documentation papers to determine if the airframe and the engine were certified to JAR 22. Most production sailplanes made in Germany must meet JAR 22 Airworhtiness requirements.

A nuts and bolt kit may also have to be obtained from the airframe OEM as relates to the engine/prop support installation. Check you aircraft handbook. Ignition system, carbs, starter and exhaust system and engine logbook are to be returned with the engine. Engines overhauled at the Austrian Rotax factory certified according to JAR 22 will be run-in and test cell documentation recorded. In essence, these overhauled engines will be "factory approved" to meet JAR 22 certifications for performance and mechanical tolerances and should have a limited warranty.

For more information contact Bob Marshall, the U.S. Rotax Distributor. Bob is in close contact with the factory and can provide detailed information including the coordination necessary for overhaul scheduling and shipment to avoid excess down time.

Call 501-634-2310 (CA.)

#### Australia Self-Launchers...

Graham Engel of Ryde, New South Wales reports delivery of his DG-600M/18 after a 2-1/2 year wait. Says he has had no problems in the first 25 hours. At his home airfield near Sydney there is a "DG" collection of one 400, one 500M and his 600M.

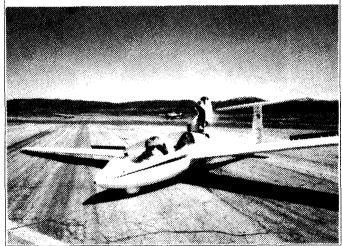
<u>Barry Bowerman of Canterbury, New South Wales</u> waited over 4-1/2 years for his DG 500M. He reports 12 flights so far and some minor problems with throttle linkage and disc brake caliper rubbing on the tyre.

# Flying The Grob G 103 C Twin III Self-Launcher...

There are six two-place retractable engine Grob 103s in the US and more on order. This sailplane can be used for checkout and training of pilots transitioning to motorgliders per FAA Advisory Circular AC 6-94 as it is an excellent vehicle to teach pilots procedures required for operating a retractable engine sailplane. Ex-factory price is 149,500 DM. The Grob Twin III has dual engine controls to permit instruction in procedures to erect and lower the engine as ground starts, takeoffs, engine securing and air starts. Engine erection/lowering and prop braking are semi-automatic.

A Rotax 505A with 43 hp powers the ship and provides a dual takeoffclimbrate of about 400 fpm at sea level standard conditions at max gross weight. This ship has successfully self-launched with two pilots on board at Minden, NV (4720'msl, no wind, hard surface at 60° F). Ground roll to liftoff was about 2,000' with an average climb rate of about 250 fpm. The Minden-based 103 SL has a special fixed-pitch climb prop installed. RPM on climb is 6,700. Static runup RPM is 6,400. Takeoff rotation is 43-5 Kts and climb out is 53-57 KIAS.





Grob G 103 C Twin III Self-Launcher

Engine extraction and start is simple, just pull a T-handle. When fully extended check fuel ON, choke and throttle set and turn the automobile-like ignition key to Start, To secure and retract engine, turn ignition key OFF and when the prop is slowly rotating, press the engine retract button. The propeller will windmill to vertical lock position and the engine retracts. Turr off fuel cock and push the Engine Electrics button and you are-flying a sailplane. Ground handling with engine running is via the steerable nose wheel. Wide turns are possible and some planning is necessary to negotiate sharp corners. Small plastic wheels are installed on the wing tips.

This ship is on lease-back to High Country Soaring at Minden and by prior arrangement may be made available as a checkout ship for pilots desiring a logbook entry to transistion to a powered sailplane. For more information contact:

Tom Stowers High Country Soaring P.O. Box 70 Minden, NV 89423 702-782-4944

SLSPA understands that a checkout in this type of ship may also be available in Florida. For details contact:

Stan Nelson at 407-859-3265

# Wide Tape for Gear and Engine Doors...

Steve Drane of Kerrville Texas says he has located 3 inch wide white vinyl tape at \$20/Roll from:

Ready Made Sign Co. 480 Fillmore Box 801 Tonowanda, NY 14151 1-800-544-2440

# Motorglider Safety Tip...

Reprinted by Permission from Soaring Pilot Magazine Issue #2 1993.

"The engine on many motorgliders extends from a compartment behind the wing. The propeller is then behind the center of pressure, or center of lift created by the wing. If the engine fails during the takeoff climb, the drag of the prop and engine mechanism is substantial and will prevent a normal response to the proper stick forward motion to keep flying speed. The typical glider pilot might not push the stick forward far enough or with enough authority to make the nose go down positively. The result might be a stall at very low altitude. In fact, this is a possible solution to several motorglider accidents after a low altitude engine failure, followed by a stall-spin. If you fly motorgliders, you should so some practice of engine failure procedures (at a safe altitude). Pay particular attention to the amount of elevator travel and the time it requires to assume a normal gliding attitude. I would appreciate some reports about this subject".

#### Tom Knauff

#### WANTED:

► Partner for DG-500 motorglider arriving Spring 1994. Based at Montague, Truckee and Air Sailing (Reno). Contact David R. Volkmann 916-246-7559/Home or 916-223-2585/Work.

## FOR SALE:

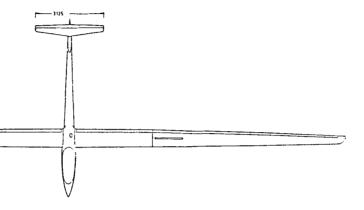
- **▼ DG-400 S/N4-133 Airfram-500 hrs** Engine 71 hrs. Full instruments and Cobra Trailer...\$62,000 Jim Miles 808-395-1971/Home 808-533-4128/Work
- Nimbus 2M with Rotax 505 TTA 600 hrs Engine 10 hrs. Dittel, Rico, Ball, CHT, Tach, Tinted Canopy, Disc Brake, Steerable Tailwheel, Tip Wheels, Eberle Trailer. Experimental Cat. license. This is a brilliantly engineered self-launching conversion licensed in the Experimental category. If you have ever wanted to get into a 48:1 powered sailplane at an affordable price, THIS IS THE SHIP at \$35,000!

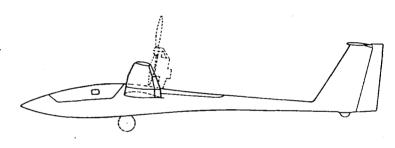
Bob Marshall 510-634-2310 (CA)

#### Schleicher ASW 22BLE...

Gerhard Waibel reports the ASW 22BLE (Rotax 505A) has a 26.4 meter span (86.6 ft.!) and uses 1 ft high winglets. It weighs out at 810kg (1,785 lbs). Pilots report noticeable gains at low speed, low loss at speed up to 100kts and excellent "grooving" in thermals with good response to aileron inputs and less "antiaileron". Gerhard also reports low drag winglets are available for the AWS 24 and 24E.

For more information contact John Murray 413-625-6059 (MA)





# Member Pilot's Survey...

A total of 96 survey forms were mailed out. As of this Newsletter we have 60 responses. The survey will be tabulated and mailed out with the July-August 93 Newsletter. Thank you for answering this survey.

## FOR SALE:

- **™ DG-400** S/N 4-116 TTA 593 Engine 62 hrs. Original owner. Always hangared, Seldom trailered. Westerboer. Bohli, Wing fuel tanks. All TNs. Komet Trailer. New DG-800 coming. Jake Van Dyke 314-821-5015 (MO)
- **▼ DG-400** S/N 155 Jan 1986 TTA 300 Engine 43 hrs. Original owner, Wing Fuel Tanks, H2O Ballast bags. A14A 02, 720 radio, Large tip wheels. Standard Instruments, Mini T&S, German A1/GRP Trailer (Lift top). Dg-800 coming. Bill R. Menair FAX UK 0232 423138
- ► Ventus CT 1987 TTA 385 Engine 10 hrs. NDH, Always trailered. L-Nav @ G Meter, with CAV-II Vario, Dittel 70M, Cobra Trailer, Solar Panel, 22 Cu. Ft. 02, One man rigging, Vertical Card Compass, Trimble GPS, Camera Mount and much more. Mint condition. Paul Stone 414-336-1396 FAX 414-336-0826 (WI)