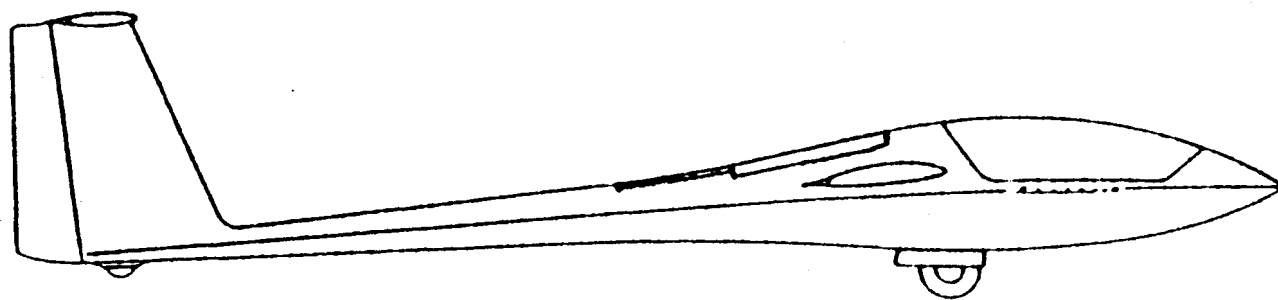


Schempp-Hirth Nimbus-4M Self-Launching Sailplane



The Nimbus-4M is a single-seat high performance, self-launching sailplane powered by an aircooled 2-cycle Rotax 505A producing 42.4 hp at sea level standard conditions. Specifications according to the factory include: 26.4M (86.6') span with a wing loading of 9.2 lb/sq. ft. at max gross weight of 1,764 lbs. Empty weight is 1,279 lbs. At sea level the climb rate is 354 fpm with a lift off run of 983' and 1,633' required to clear a 50' obstacle. Max L/D is 60:1. A 26 liter (6.8 gal) tank is located in the fuselage. The optional wing tanks increase fuel capacity by 3.96 gallons. An electric starter and 12VDC alternator/generator system are standard. Water ballast capacity is 164kg (43 US gal.). It has a 6-piece wing and is constructed of fiber reinforced plastic (FRP) with Aramid (Kevlar) and glass fibers reinforcing the cockpit area. Propeller blade design complies with the latest noise protection requirements. Ex-factory price starts at 227,000 DM.

Self-Launching Sailplane Pilot's Assn.

NEWSLETTER

NOVEMBER~DECEMBER 1993

Published Bi-Monthly by SLSPA, Inc • Pete Williams, President and Editor • Bruce Templeton, Vice President • Issue #35 Vol. V

Nimbus 4DM To Be Produced...

Reliable sources advise this new "super ship" is slated for early 1995 deliveries. Powerplant unknown at this writing, however the 60hp liquid cooled Rotax 535 is a candidate. At an L/D of 60:1, this will be the highest performing 2-place motorized ship in the world.

Engine Storage Preservative Oil...

During the winter or anytime your Motorglider will not be flown for an extended period of time, a preservative oil should be used to guard against corrosion. Check your ship's handbook for the factory recommended oil.

An American-made engine preservative oil is available. Called Engine Storage Fogging Oil, it is an OMC product that comes in a 12 oz spray can and is normally available from any marine parts house handling Johnson-Evinrude equipment. It works with 2 or 4-cycle engines (outboard motors, snowmobiles, motorcycles, etc.).

Instructions say to spray 2oz per cylinder at 2,500-3,000 rpm and stop the engine. Tape carb throats and exhaust stack. More info? Call or write OMC Systematched Parts and Accessories in Beloit, WI 53511.

Is Soaring to Change Forever?

The following is a digest of an article by Dr. Karlheinz Scherler (Aerokurier Magazine) translated into English and appeared in New Zealand's Gliding Kiwi magazine. Submitted to SLSPA by Bruce McGhie.

"Pilots who do not like powered sailplanes believe that they will usher in the end of soaring proper. The others think that those who oppose them are today's Luddites. The fact is that over 50% of the sailplanes now sold are either self-launching or self-sustaining. Does this mean the "pure" ships are destined to become old timers, stuff for a few gentleman/gentlewomen flyers?

"The Pros of having an engine removes the need for a retrieve crew and a tow plane (in the case of self-launchers). Flying is now possible before thermals start and after they end. Remote starting points can now be used which are now too far for an affordable tow. The dream of the 1000km flight can be attempted more often. Flying experience can be broadened to open new challenges that heretofore were not attempted.

"The Cons of having an engine, it is said, changes the quintessence of soaring by relying on the elements. To use the engine is a betrayal of the original soaring pilots' philosophy. The struggle to avoid an outlanding loses its fascination; a part of the satisfaction and excitement is lost. In competition the engine provides an artificial resource—an advantage just because it is there.

continued to page 2

continued from front page

"In soaring clubs (common in Europe) much of the team spirit is lost as the powered sailplane pilot becomes self-sufficient and the club begins to transform into a number of individuals."

Editor's Note: *Mr. Scherler's predictions are that the emotive feeling either way can be debated ad-infinity and the real answer is to recognize the fact the powered ship is here to stay and soaring clubs and individuals are going to have to deal with the changes taking place.*

Since the US is not as heavily club oriented as is Europe, there will most likely be less of a club social impact as the numbers of powered ships continues to grow. The only other "social" impact experienced here in the states is best described as an alienation from previous soaring pilot associates especially if you were a so-called "purist" prior to becoming a motorized ship pilot. This is, unfortunately, the "emotive factor" that tends to separate pilots into groups...the good, the bad and the ugly. Most of the so-called advantage claimed by our purist brothers is psychological. Once the engine is off, MG pilots fly the same way the purist flies when he is off tow. There are two exceptions: wing loading cannot be reduced to a minimum and the pilot never knows for certain that the engine will start when he really needs it!

Len Gelfand's PIK-20E...

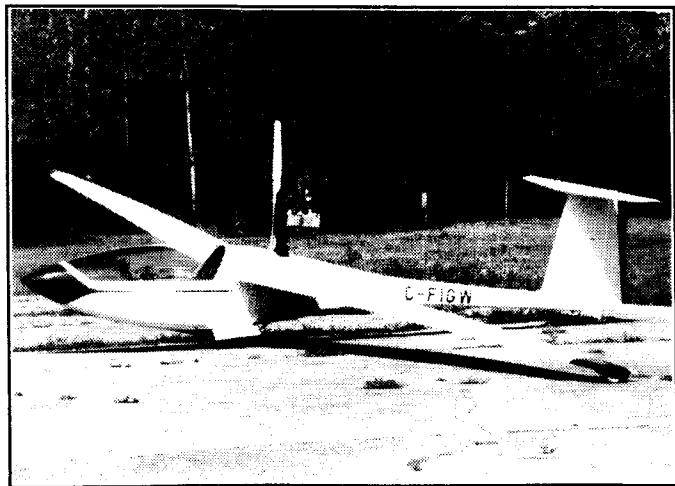
SLSPA member Len Gelfand who lives in Ottawa Canada sent this interesting background on Ser# 20297

"At long last I have photographed my Pik-20E. Two shots are enclosed, one with the engine extended, the other with it retracted. If you look carefully with a magnifying glass you will see the SLSPA decal. There is also one on the side you can't see. Mustn't upset the glider's balance.

"TTAF is near 450 hrs and TTE is 120. One of the previous owners was a jet jockey, liked to use the engine to tour the countryside.

"There were four previous owners. The former Pik factory owner told me this ship was built in 1980 as a toy for himself and partners. The Finnish logbook shows them as first pilots. In 1982, the late Tom Smith (Smitty's Soaring Service) imported it into the US for an Indiana customer named James and Selma Freeze and the registration changed from OH-611 to N3234X. These folks sold it in 1986 to William Coleman in Michigan who sold it to Texan Troy Welch from whom my partner bought it in 1989. We didn't fly it until 10 months later because of the red tape to make it legal in Canada."

Thanks Len for the informative background on this ship.



PIK-20E S/N 20297 C-FIGW

Changeout of Retraction/Extraction Motor in DG-400...

Steve Drane of Kerrville Texas recently replaced the subject motor and has all details on "How To" including parts costs. Contact him at 512-895-3027

SLSPA Editor Tests Wx/Block System Gel Coat Protective Compound...

The Wx/Block 2-step application for Gel Coat was put to the test for 4 months of exposure to Nevada UV on my DG-400. I found it goes on and off easy and leaves a high gloss. It comes in 2 one quart bottles. Put the Wx/Seal compound on first and follow with the Wx/Block protective compound. After initial application, you can re-apply the Wx/Block several times a season. Since using this product, there has been absolutely no white gel coat residue in the wash bucket after wiping down the ship. More Info: 215-721-4394

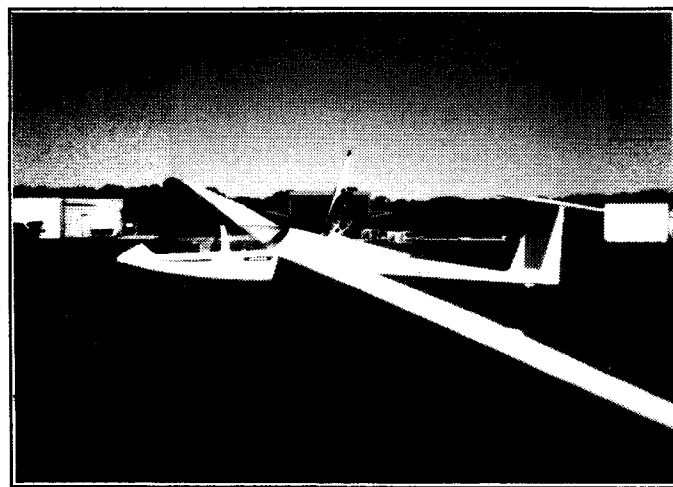
East Coast "Nutmeg" Safari...

SLSPA member Fred Jacobs participated in his DG-400 along with ASW-19 (John Boyce), and ASW-20 (Burt Rhodes) and a PIK-20D (Team of J.B. Gardner and Joe Murphy).

This was the 5th Annual Nutmeg Soaring Association's Safari and was flown in and around the "Blizzard of '93" as reported by Fred Jacobs in their newsletter. Departure from Wethersfield, CT was on March 28, five days late as several members had to dig their ships out of the snow drifts. Return was April 21st after driving 2,505 miles, (Now THAT'S a Safari!) Route included Wayneboro VA, Elkin NC, Jonesboro NC, Benton TN, Asheville NC. On the good days, Fred reported four to six hour flights. The four sailplanes accumulated 160 flight hours during the trip. In spite of "leaving the wing pins at home"; "locking the car with the engine idling"; "forgetting to remove all the clothes from the dryer and a few other insignificant happenings, good time was had by all."

Thanks for the report Fred.

Barry Bowerman's DG-500M...



Barry Bowerman of Canterbury, Australia reports 85 airframe hrs and 10.5 engine hrs as of mid-June 1993. "Handles like a fighter-bomber" he says. Barry also owns a DG-400 and has 240 hrs in the ship.

September 1993 SSA Board Meeting Report...

1. GPS permitted in cockpit for navigation in 1994 contests.
2. 1995 SSA Convention in Reno, NV sponsored by Air Sailing.
3. 1995 contest locations:
 Standard ClassSiskiyou County, CA
 15-Meter ClassHobbs, NM
 Sports ClassAlbert Lea, MN
 Open ClassMinden, NV *Dec 11-20 95*
4. SSA President - Mike Koerner
 SSA VPs - Byars, Jacobs, Hammond, Spratt
5. Raise in Annual Membership Dues to be discussed at Chicago Convention Feb 24-26, 1994. Individual membership costs SSA \$68.44 per year!? Membership is essentially flat. Members are encouraged to contact your regional directors with ideas and comments.

Editorial...

How goes it in the motorglider market? SLSPA membership has remained stable at 250 with 50-60 new members per year and about the same number who do not renew annually. Each year, between 8-10 pilots take delivery of a powered ship. The majority of which are used. The world-wide business turnaround and high wages paid in German factories are the main factors contributing to the excessive cost of both powered and nonpowered ships. This has created a high demand for used motorized ships but has slowed down world-wide new motorized ship sales.

If new ship prices stay as is or move upward, (as they have done since 1983) sales will continue to suffer and the customer base will continue to contract. Since Germany produces most of the powered ships (and nonpowered for that matter), their worldwide customers are at the mercy of the German economy. Perhaps the time has come to stabilize (freeze) certain good designs and work on price reduction by amortizing development costs over a longer period of time. Traditionally, German designers race each other to get the "next generation" of hi-tech, high performance ships into the competition circuits. This has created a price spiral that permits only the affluent to own such ships and pinches sales to ever descending levels.

Yes, technology must go forward but somewhere along the line price becomes a formidable barrier to sales, especially when driven by obtaining the competitive edge. The final result of all of this is the creation of an exclusive group who can afford to stay in the game. The losers are clubs and individuals who soar to enjoy the sport.

It's time for a change and the winner might just be the company that adjusts to the market conditions. There is room for both Fords and Ferraris.

PAW

The 1994 Motor National Soaring Championships will be held at the Municipal Airport in Winter Haven Florida 19-28 April (Practice days: 17 & 18). Applications to participate in this event are being taken by Don Pollard, 219 N. Lake Hartridge Dr., Winter Haven, FL 33881. Ph: 813-956-9113 FAX: 813-956-9018. Don reports April is the best soaring month for this area with cloud bases as high as 7,000 agl.

German National Motorglider Championships...

There were 36 entries. Top 5 each class shown below.

Open Class	15-23 Meter Class
BalzASH25E	BeckerVentusCM
BinderASH25MB	BeilharzVentusCM
KerresNimbus3DM	ClasDG-600M
KnaubASW22BLE	DirksDG-600M
LodesASW22BLE	DolbaNimbus2M

Club Class

HoffmanSF25E
JagslandSF25E
KuettelSF25E
LehmannRF5B
PommerSF28

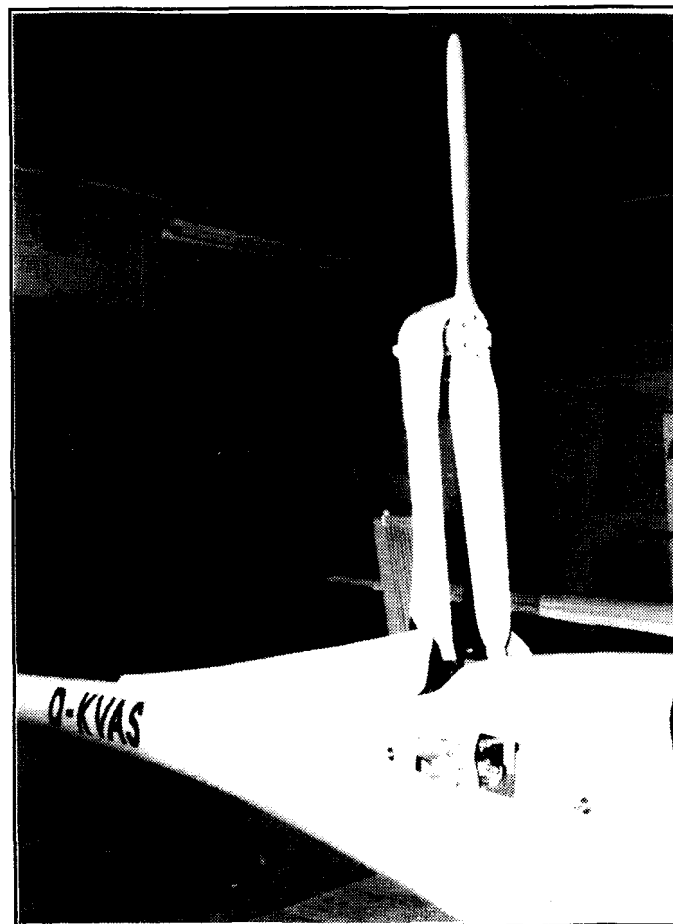
This report submitted by Karl Abhau.

SSA 1994 Convention Activities...

To be held at the Marriott Lincolnshire (Northern Suburb of Chicago) Feb. 24-26, 1994. Jim Short of the Chicagoland Glider Council advises 29 of the 45 booths sold and that he has 40 speaker requests and only 33 openings for speaker rooms.

The **Motorglider Breakfast** will be on Friday 25th at 0730 with the SLSPA Board Meeting following the breakfast. The results of a recent Motorglider Owner Survey will be discussed and information on the **1994 Motorglider Nationals** will be presented. An SLSPA representative will be at the speaker sessions concerning the DG-800 (Wilhelm Dirks) and the ASH-26E (Gerhard Wiabel). SSA '94 promises to be an interesting and well attended show with a DG-800 and ASH-26E slated to be on the display floor

*Wankel-Powered ASH-26E with Propeller Extended.
 Photo courtesy of SLSPA member
 Peter F. Selinger, Stuttgart, Germany.*





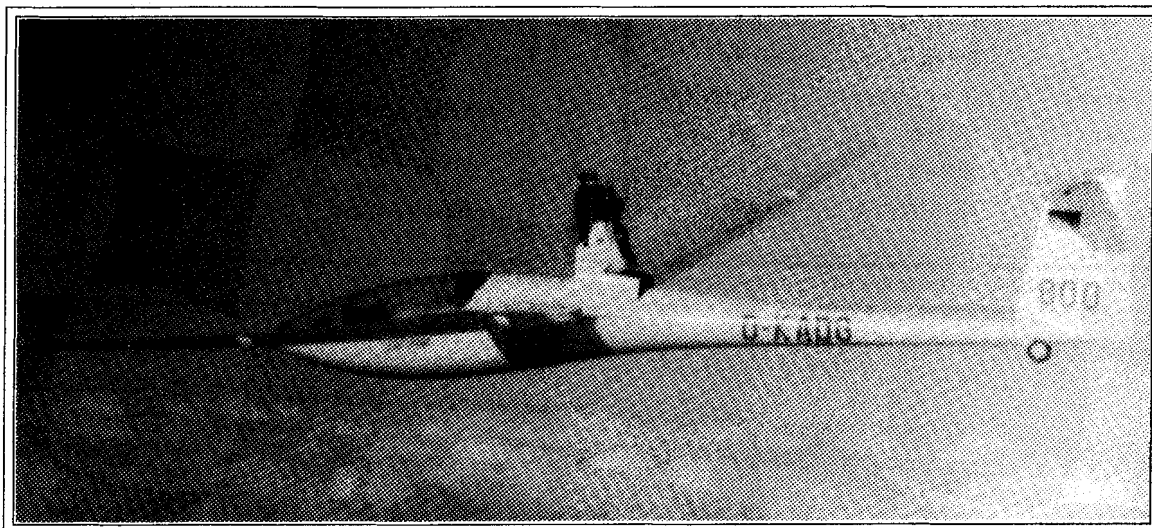
Glaser-Dirks Flugzeugbau, GmbH

Im Schollengarten 19-20 • D-76646 Bruchsal 4 Germany

Postfach 4120 • D-76625 Bruchsal Germany

Telephone: 07257/8910 Telefax: 07257/8922 Telex: 7822410 gldg d

DG-800



**THE ULTIMATE SELF-LAUNCHING SAILPLANE
IS NOW AVAILABLE FOR SUMMER 1994 DELIVERY POSTIONS!**

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-800** represents over 10 years experience employing this design and construction concept. Today, Glaser-Dirks leads the world in the production of this type of ship with 290 DG-400s delivered since 1982. No other ship of this type can equal the DG-400's reputation for performance combined with safety and reliability and high demand on resale.

As the successor to the 400, the **DG-800** incorporates all of the design features that have made the DG-400 the best buy for pilots who want the **TOTAL FREEDOM** of unassisted ground operations for taxi and takeoff. The tried and proven Rotax 505A produces 43-45 hp at sea level with adequate power for launches at most higher altitude fields.

ADVANCED DESIGN As the flagship of the single-place self-launching line, the **DG-800** is a complete redesign of the DG-400 with the exception of Glaser-Dirks famous safety cockpit. With unexcelled comfort and visibility, the DG cockpit

is a pilot's dream; roomy and functional with adjustable rudder pedals and seat back.

The **DG-800** is the first sailplane using an advanced 18 meter wing design of L.M.M. Boermans of Delft University. This all-new wind tunnel tested airfoil has drag coefficients equal to or better than the extremely thin HQ 35 wing profile of the DG-600. The advantage of this new profile is that it can be thermalled at much slower airspeeds and still retain a low sink rate. The result is an improved climb rate combined with gentle and forgiving stall characteristics. The precision of the wing profile is uniform throughout as the mastermodels were machined using computer control. The **DG-800** also has a completely redesigned vertical tailplane and horizontal stabilizer.

HIGH PERFORMANCE The **DG-800** offers outstanding performance in all areas. Takeoff distance over a 50' obstacle is 837 ft. at a takeoff weight of 970 lbs. [440 kg.]. At 1,160 lbs. [525 kg] maximum gross weight this distance is 1,067'. Climb rate at sea level exceeds 700 fpm. The gliding performance is over 50:1 which is equal to most of its non-powered competitors. It also has the capability to stay aloft in reduced lift conditions.

NOISE REDUCTION, SAFETY AND RELIABILITY Engine noise has been significantly

reduced with a new damping fairing around the cylinders. With new intake filters and a specially designed MT propeller (more thrust, less noise than the DG-400 prop.), the **DG-800** has the lowest noise level of any self-launcher.

The **DG-800** is a safe ship to fly. Control forces are light and well harmonized. Pilots like the crisp roll rate and the ease of elevator trimming using the lever located on the control stick. The parallelogram geometry of the elevator control also assists the pilot in avoiding pilot induced oscillations at higher speeds. The double shell safety cockpit is an industry first and plays an important role in pilot protection by absorbing high G forces in the event of a crash landing. All control hookups are fully automatic. Wing construction is full carbonfiber. The fuselage is carbonfiber-aramidfiber. These advanced composite materials provide a high measure of flight safety, ruggedness, airframe longevity and low weight (One 18 meter wing panel weighs only 143 lbs. [65 kg.]).

Engine and engine support modification and improvements incorporated in the DG-400 over the past 10 years have made the Rotax powerplant one of the most reliable self-launching engines on the market today. This tried and proven powerplant experience is incorporated in the **DG-800's** Rotax 505A.

THE GLASER-DIRKS DG-800 SELF-LAUNCHING SAILPLANE

FOR COMPETITION, RECORDS, CROSS COUNTRY OR JUST SOARING FOR FUN... NOTHING ELSE EVEN COMES CLOSE!

DG-800**SPECIFICATIONS**

	<u>Metric</u>	<u>U.S. Equivalents</u>
Fuselage Length	7.025m	23 ft
Fuselage Height	1.434m	4.7 ft
Wing Span	18 m	59.1 ft
Wing Area	11.81 m ²	127.1 sq ft
Wing Aspect Ratio	27.42	27.42
Empty Weight	328 kg	723 lbs
Max Takeoff Weight	525 kg	1,157 lbs
Wing Loading/80 kg payload	28.9 kg/m ²	7.08 lbs/ft ²
Waterballast, Wings (Std)	120 liters	31.7 gal
Fuel Capacity (Fuse Tank)	22 liters	5.8 gal
Fuel Capacity (Wing Tanks)	2X15 liters	2x4 gal

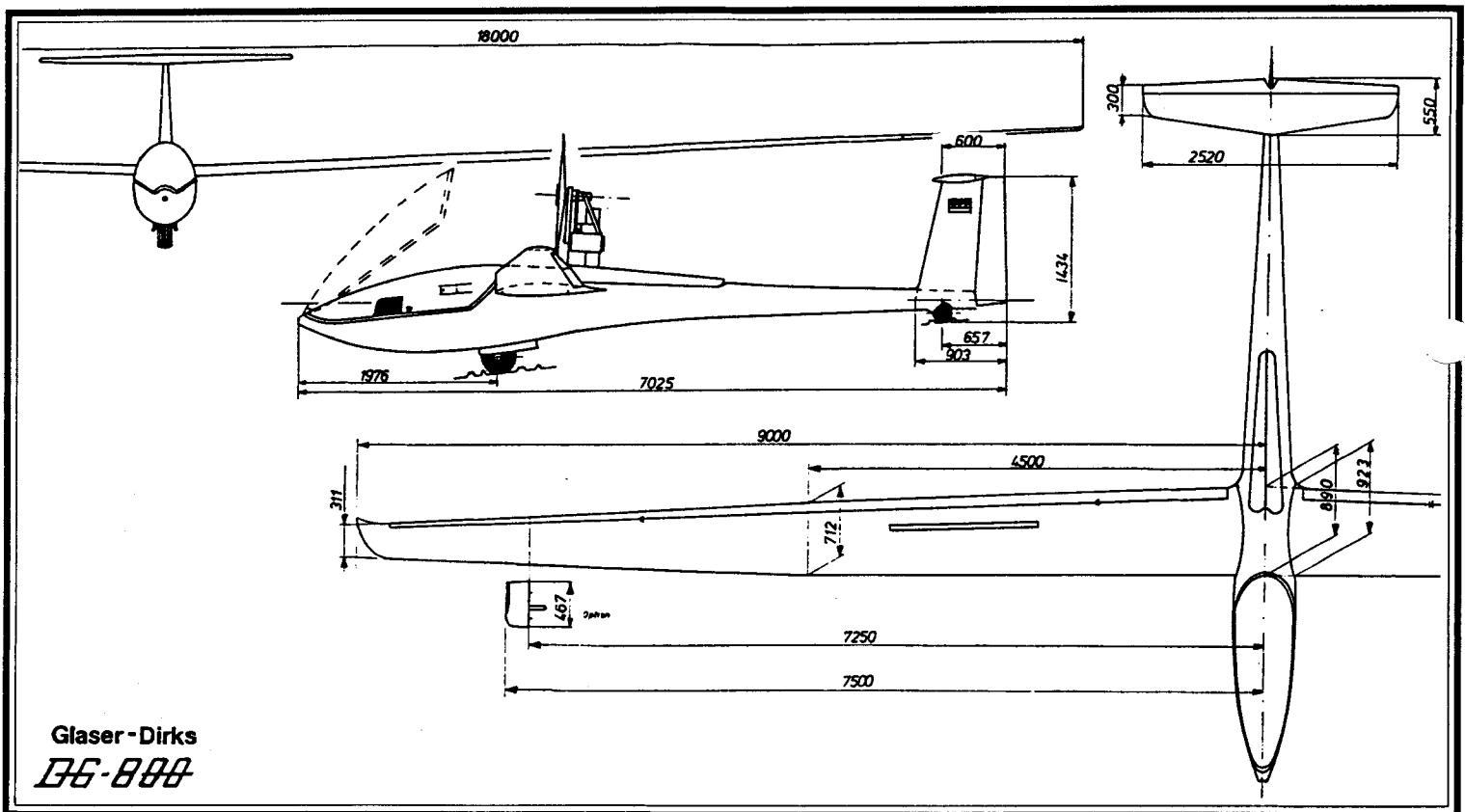
PERFORMANCE

	<u>Metric</u>	<u>U.S. Equivalents</u>
VNE	270km/h	146 kts
Stall Speed (80kg payload)	68 km/h	37 kts
Takeoff Distance *		
over 15m/50ft obstacle	260m	853ft
Climb Rate*	3.7 m/s	782 fpm
Best Glide Ratio-50:1	110 km/h	59 kts
Minimum Sink @ 350 kg/772 lbs	.5 m/s	98 fpm
*450kg/992lbs		

POWER PLANT

	<u>Metric</u>	<u>U.S. Equivalents</u>
Powerplant type/output:		
2 cylinder, air-cooled,		
dual Ignition ROTAX 505A		
2-stroke engine	32 KW	43hp
Propeller: Wood and		
fiberglass MT 136R75-1B	1.36m	4.46ft

All specifications and performance figures based on factory calculations for 18 meter ship using Standard Day, Standard Atmosphere, Sea Level, Gross Weight conditions unless otherwise noted.

**SPECIAL OFFER**

Glaser-Dirks announces a **SPECIAL OFFER** for a limited time on ten (10) delivery positions for their new DG-800. This offer expires 1 April 1994. These ten sailplanes will be equipped as follows at **no extra charge**:

*ASI and Mechanical Variometer installed; TE probe; Tail Dolly;
Seat Cushion and Optional Automatic Electric Propeller Brake!*

THIS IS A LIMITED ONE TIME OFFER. ~ FIRST COME, FIRST SERVED.

Contact your local DG Dealer or the Factory today for prices and reserve your early delivery position!

P.S. If you are interested in our popular two-seat self-launcher, ask for information on the DG-500M

U.S. Dealer: GLASER-DIRKS USA • 5847 Sharpe Road • Calistoga, CA 94515

Telephone: 707-942-5727 • Telefax: 707-942-0885