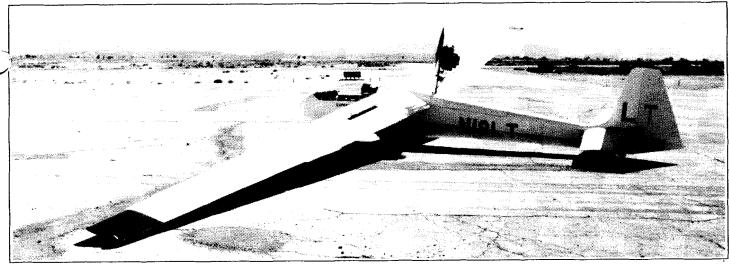
### Scheibe SF-27M Self-Launching Sailplane



This single seat 15-meter ship first flew in the early 70s. It was one of the first auxiliary-powered versions of a production sailplane (Scheibe SF-27A). A steel tube, wood and fabric ship, the 27M had a respectable 34:1 L/D. Power is provided by a 4-cylinder 2-cycle Hirth engine developing 26 hp. Engine extension was manual. Empty weight - 574 lbs. Gross weight - 850 lbs. Only two are believed to be active in the U.S. The ship shown was flown by John Mathias out of Douglas County Airport, Minden NV in October 1990.

# Self-Launching Sailplane Pilot's Assn.

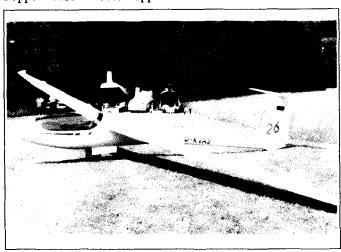
## NEWSLETTER

### **SEPTEMBER - OCTOBER 1993**

Published Bi-Monthly by SLSPA, Inc - Pete Williams, President and Editor - Bruce Templeton, Vice President - Issue #34 Vol. V

#### Schleicher's ASH-26E Progress Report...

By the time you read this newsletter the Wankel-powered ASH-26E has most likely completed its maiden flight near Poppenhousen-Wasserkuppe.



#### ENGINE:

The following details on the engine were provided by SLSPA member Peter Selinger of Stuttgart:

Туре		Wankel Rotary, Spark Ignition
Manufacturer.	•••••	Mid-West Aero Engines Ltd
		Gloucestershire, England
Type Designat	ion	AE50R
Cartification		IAR-22

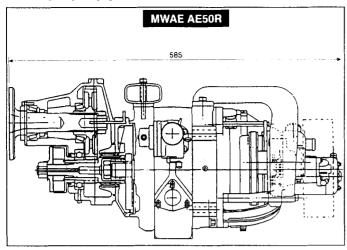
Dispidocificite	
Output at 7,500 rpm	50 BHP (Max takeoff power)
Cooling System	Housing-Water/glycol
	Rotor-Air (belt driven fan)
Dry Weight	72.75 lbs (33 kg) Excludes prop/
	radiator/muffler/fuel tank.
Carbs	Tillotson diaphram type.
Fuel Consumption	0.50 lb / bhp / he at 70% cruise.
-	(approx. 3 gallons/hr.)
Generator	18 amp 12V
Gearbox Ratio	
Starter	Electric
Fuel	AVGAS 100LL
	(or Premium 94 RON unleaded)
Lubrication	Dry Sump
Oil Type	Castrol A545 or
71	Mobil Pegasus 485
Ignition System	CD/2 Plugs per rotor
	approx. 1'-11" x 10" x 10.4"

Displacement ......294cc

#### **AIRFRAME**

On 4 June, 1993, the 18 meter span non-engine version completed its first flights. Pilots reported light control forces, docile stall characteristics, safe steep landing approaches and smooth stops using the hydraulic operated disc brake. In the engined version, the Wankel powerplant will remain stationary

continued to page 2

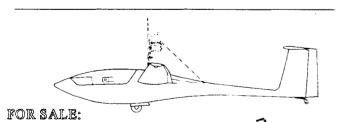


in the engine bay with only the propeller and radiator emerging for powered flight. The sailplane version will have hard points in the aft fuselage for later retrofit of power plant if desired. A glide ratio of above 50:1 is claimed for both the pure and engined version. More details to be published after the engined version test flights.

### PIK 20E/30E Engine Extension/Retraction Restraining Straps Inspection...

Len Gelfand of Ottawa Canada reports PIK-20E and 30 owners should inspect the two spring steel tension straps that support the piston rod of the air strut that assists in engine extension/retraction. He owns PIK-20E II (1980 s/n 20297) and reports hearing a loud bang during engine retraction and upon extending the engine carefully he found one tension strap broken at its lower end and the other broken at its upper end. One of the straps was slightly twisted at the break suggesting that the other strap had broken at some earlier time with the twisted one bearing the load for some time.

Len says to make a careful visual check as the bottom of the strap is hard to see clearly with a casual glance. This event happened (luckily) on the ground. Len obtained new straps from Bud Schurmeier.



PIK-20E 1979 s/n 20245 TVA/F 385, Engine 93 hrs. Dittel 71M Radio; Cambridge M. Wylon Baro, PIK factory trailer. Bill Crouch 904 234 3637 (FL).

**☞** Grob 103 SL 1992 TTA/F 200 Engine 60; S-NAV, Dittel Baro Cobra Trailer...\$110,000 Hyman Baker 407-277-0192

To Coora Tranier...\$110,000 Hyman Baker 407-277-01

Motorgliders Place 1st & 2nd at Region 11 North Contest held at Siskiyou County Airport, Montigue, CA Sept 1-5, 1993...

David Volkmann (DG-400 17M) and the Tupper Robinson/Don Hurd team (DG-500) placed 1st and 2nd in Sports Class at this regional out of a field of 12 entries. Volkmann's 4,945 points out of a possible 5,000 was followed by Tupper's 4,056. Both ships were subject to handicap scoring. Volkmann elected to tow and Robinson self-launched. It is believed that this is the first time powered sailplanes have earned 1st and 2nd place positions at a sanctioned regional contest. Bob Moore who self-launched daily in his PIK-20E in the Standard Class came in 5th. Congratulations to all and thanks to CD Bary Kemp for permitting the option to self-launch. Thanks also to Bob Moore for sending this report.

# 36 NEW MEMBERS ... WELCOME ABOARD!

John Beveridge/CA James Stoll/FL H. Peters/CANADA Richard Buri/IL Mark Baker/CA COMAV/AZ James Biglane/MI Don Hurd/CA/DG-400 Rod Bunke/CA Bruce Rose/OR/TA/arek Bruce McGhie/CT/Grob103SL Christian Talarek/CA Carlos Barcia/SPAIN Mike Parker/AZ Don Westerberg/WA/Dimona Gary Loveness/WA Jose Pires/PORTUGAL/SF27M O.L. Patty/CA/Grob109 Eric Greenwell/WA/ASH-26E W.T.Harvey/FL/Grob103SL Steve Winsor/AK George Nuse/GA Marge Forood/CA Lee Shippen/NV Harry Miltner/WA/Mosquito James Hawk/MI B.N. Willis/FL/PIK-30 Ed Shilen/TX/VentusCT R.C. Hoffman/CA/Grob109A Tobias Grether/NC Don Phillips/AR/PIK-20E David Treinis/NC/DG-400 Brad Lewitzke/WI W.W. Steinke/AZ Sheehan/Kriz/AUSTRALIA/ James McCulley/VA DG-400

#### Schleicher ASW 22 BE/BLE Takeoff Distances...

A recent letter form Gerhard Waibel says that the Rotax 505A is the engine used in the ASW-22 with a 5.2' Prop with an engine reduction rate of 3:1. Gerhard claims increased static thrust with this combination.

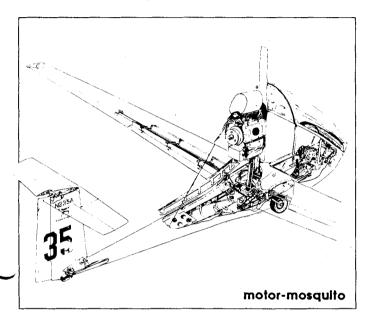
Sealevel, standard conditions, ASE 22 BE and BLE

	750kg 1,653 lbs.	810kg 1,785 lbs
Takeoff Roll Distance	984'	1,489'
Distance to 50' agl	1,673'	1,879'

Gerhard says to reduce the above distances by 20% for a hard dry surface.

#### Harry Miltner's Rotax-Powered Glasfulgel Mosquito...

With help form friends and considerable talent and tenacity, Harry Miltner completed this conversion in September of 1984. As such it is the only Mosquito powered by a Rotax 501. Some of the highlights of the conversion include use of the existing PIK-20E manual brake system for engine raising and lowering, a weight gain of 130 pounds, 2,000 manhours, \$3,100 invested in engine and materials, 4" wingtip wheels and a steerable tailwheel. Miltner says he continues to enjoy his "emancipation" form tugs, wing runners, towpilots and tow ropes. Good show Harry! Send SASE to SLSPA for details in an article published in April 1986 Sport Aviation.



### Bruce McGhie Reports on Flying the GROB Twin III Self-Launcher Modified for Hand Controls Only...

SLSPA member Bruce McGhie is a paraplegic with over 775 solo soaring hours. Able to use only his hands as a result of a fall in Air Force preflight training in 1955, Bruce is paralyzed from the chest down. The powered GROB Twin III SL is his third sailplane and his FAA certificate lists him as a Private Pilot valid to fly aircraft equipped with hand controls. Bruce soloed in sailplanes in 1980.

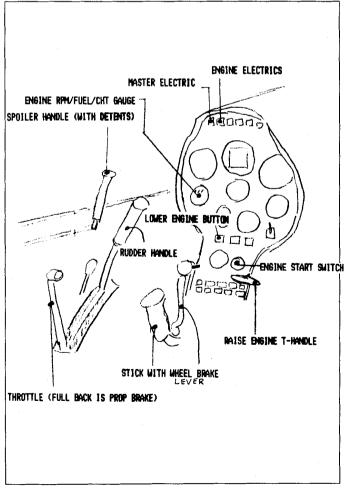
In May of this year Bruce took delivery of his self-launching Grob. The modification of the controls for "hands only" is a design originated by double amputee Vietnam veteran Terry Frazier, another active paraplegic soaring pilot. The Grob factory installed these controls prior to shipment in coordination with U.S. Grob dealer Mike Shade. Bruce, 60 is a semi-retired financial consultant with Fortune 500 clients.

Bruce has had several articles written about his soaring activities and says most of them make it sound easier than it is. He says the main problem is dealing with the rudder and spoilers simultaneously, especially on landing. The critical point is moving the hand between the rudder and the spoilers handles during approach and landing. Now, with the powered ship Bruce has additional cockpit duties to handle throttle and prop brake, not to mention operating engine and fuel switches and

buttons on the instrument panel. But he has mastered these duties and is now approved by the FAA to fly the engined Grob Twin III SL. As such, it is believed Bruce McGhie is the worlds first paraplegic to be certificated to fly a retractable engine powered sailplane. Congratulations Bruce!



L to R Mike Shade, Grob Dealer; Bruce McGhie; FAA CFITG Johann Kuher. immdediatly after Bruce's check ride May 14, 1993.



Grob Twin III SL Hands Only Control Setup