

Shopping for

by JAN SCOTT

An American FBO Samples What Europe Has to Offer

	Grob G-109	Scheibe SF-36	Dimona
Wing span (meters)	16.6	16.3	16.0
Empty weight (lbs.)	1276	968	1034
Best L/D	30	28.5	27
Best sink (M/S)	1.14	0.9	0.9
List price	\$36,700	\$34,320	\$37,850

The powered gliders appear to have come of age with the new models that are now being marketed. Sleek fiberglass structures, sports-car-like cockpits, powerful engines with feathering propellers and convenient conventional landing gear are tantalizing buyers all over the world.

As we were considering one for our Virginia fixed base operation, we traveled to Germany last summer to try out four models: the Grob 109, Hoffmann *Dimona*, Valentin *Taifun* and Scheibe SF-36. Our primary requirement was the ability to operate out of our 2500-ft. grass strip on a hot summer day. This, we soon decided, eliminated the *Taifun* from consideration, due to its very small wheels. We then concentrated on the other three, flying each for about 30 minutes in similar wind and weather conditions. No sales people or company test pilots were present to influence our judgment. We thought our impressions might be of interest to others.

The single ignition 80-hp Limbach engine common to all three aircraft is started like a car: pull the choke and push the starter button. The engine comes to life with a reassuring roar, but little else happens. It takes a lot of power to get these aircraft moving! Steering and visibility are quite good during taxiing. Engine warm-up is painfully slow, and a run-up before departure is necessary to assure that the propeller is in climb mode. No mag check. The takeoff run is unsteady due to the narrow, fast-moving prop wash

hitting the fin. That and the roar of the engine gives visions of P-51-type take-off performance. A thousand feet down the runway, one realizes that this is not going to happen with any of these machines. Each aircraft leaves the ground rather reluctantly and climbs no faster than a 2-33 behind a Super Cub.

After reaching cruising altitude, the propeller is jerked into traveling mode, and the efficiency of all three aircraft becomes apparent — more than 100 knots indicated at three gallons per hour! Fantastic! We liked it even better at 65 knots, with the engine turning over with a quiet whisper and getting 50 miles to the gallon. To glide, one simply turns off the ignition and pulls the feathering handle after the propeller stops. The aircraft keeps flying with very little change in nose attitude.

The sink rate is somewhat high for a 28-30 L/D aircraft, and climbing in thermals may not be as easy as the performance figures indicate. (All three of the aircraft we flew had undamped variors that were nearly useless for soaring.) The spoilers allow excellent glide path control and should be left out until after touchdown to avoid an embarrassingly long float. The propeller returns to the climb mode automatically when the engine is restarted in flight.

Below are some of the impressions we received from each model:

Entry-Exit: The *Dimona* was best, with the canopy swung open to the rear and the landing gear serving as

a step. Getting into the Grob was difficult.

Headroom-Legroom: Superior in the Scheibe; adequate in the other two.

Visibility-Ventilation: Visibility is good to excellent in all three. Ventilation is very bad in the *Dimona* but Hoffmann is promising improvements. Only the Scheibe can be taxied with the canopy in the open position.

Controls: Stick and rudder feel comfortable in the Grob and Scheibe. The *Dimona* we flew had excessive friction in the aileron system and insufficient rudder control on takeoff and roll out.

Cockpit layout in Grob G-109

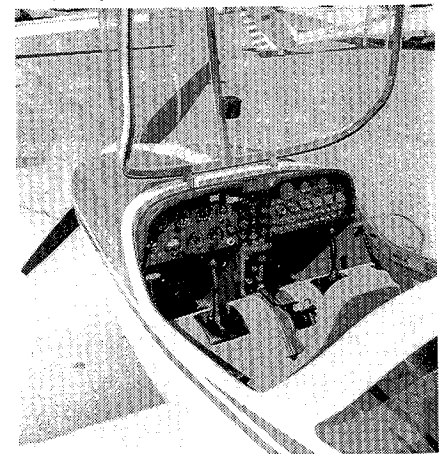


Photo courtesy of Grob

Motorgliders



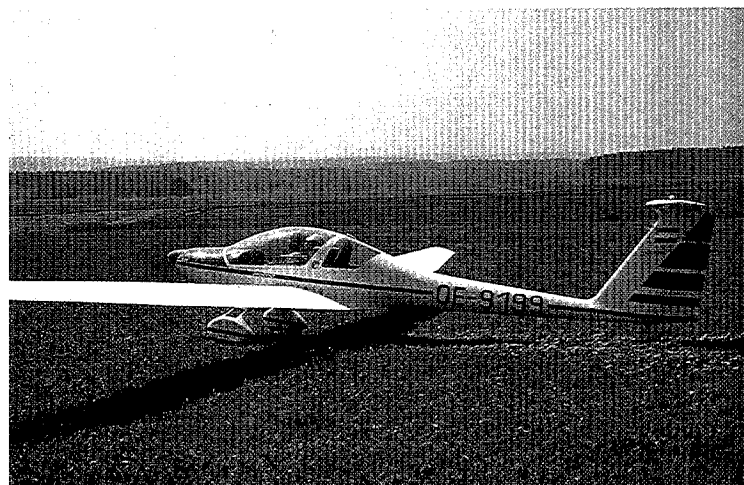
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Author liked control layout in Hoffmann Dimona



Doernie and Associates

Grob G-109 off Torrey Pines, California



Jan Scott

Scheibe SF-36 is lightest of the three

Best control harmony — Scheibe. While the Grob has the best looking cockpit, it is also the least functional. I got my little finger painfully stuck behind the spoiler handle and the wall, an elbow hit the rear of the cockpit while retarding the throttle, and the manual propeller control handle had to be pulled halfway across the cockpit. These controls are much better laid out in the *Dimona*. The Scheibe has a panel-mounted throttle quadrant with a 180° throttle movement. This is confusing, since one has to move the throttle aft initially to increase power. The Grob has individual wheel brakes, which

makes it the best handling on the ground. It was also the heaviest of the three and the poorest performer.

Service: The Scheibe appeared to have had cooling problems; it is the only one with cowl flaps, and our test aircraft had a retrofitted oil cooler. Engine access was very good, and all maintenance access looked simple. The *Dimona* had the quickest engine access, but beware — one lost its cowling in flight while we were there. It also has a swingback wing arrangement for easy storage. Tiedown provisions are good on the Scheibe, less suitable on the Grob.

In summary, one can see that all three aircraft have problems that will hopefully be corrected on later models. If the best features of each were combined, one would surely have a terrific product. We would have chosen the *Dimona* if it had better rudder authority on the ground. We believe the main gear is located too far forward, thereby causing this problem. We considered the Grob to be too sluggish for our grass runway. We are thus favoring the Scheibe and are eagerly awaiting its certification.

