GROB G115C

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BAVARIAN 160

An impeccable machine may find that the second time's the charm.

BY THOMAS A. HORNE

emember the Grob G115? This was the snazzy, two-seat, composite-construction trainer we wrote about in the July 1988 issue of AOPA Pilot ("Mindelheim Direct Bluffton: The Grob G115"). The airplane was introduced in hopes that it might find a niche as one of a new, more upscale breed of instructional airplanes. We gushed about the G115's high design quality, clean lines, orderly cockpit, knockout visibility through a large

PHOTOGRAPHY BY MIKE FIZER





sliding canopy, and superb attention to detail.

The airplane was a delight to fly and had the fit and finish you'd expect of fine German hardware. But if the G115 was a roaring design success, it was a commercial flop. Grob's American operation—Grob Systems, Incorporated's Aircraft Division of Bluffton, Ohio—was asking \$75,000 for a barebones G115. In the trainer market, it was up against Piper, which at the time was underpricing its trainers— Cadets and Warriors—in what would prove to be a suicidal attempt to create the impression of solvency. In the short term, Piper prevailed.

That was five years ago, and plenty has happened in the interim. Piper entered bankruptcy and went into a period of abeyance from which it is only now beginning to emerge. Grob, never dependent on aircraft sales for its well-being (its main products are automotive machine tools) has expanded its line of light aircraft.

One of the new designs is an improved version of the G115 the G115C—and it's caught the eye of George Rodgers, a general aviation entrepreneur who helped make the boom years of the 1970s such a sales success.

Rodgers, who served a 12-year term as Beech's vice president of commercial sales, counts the establishment of the Beech Aero Club (BAC) network as one of his biggest achievements. Rodgers' initial goal in creating the BACs was to draw down Beech's inventory of low-end singles, but the total plan was far more visionary.

Each BAC had two primary objectives. First, of course, was the sales objective: Train pilots, create customers, sell new airplanes, build brand loyalty, and transform leasebacks on the rental line into ownerflown airplanes. But the other objective was just as important.

The BAC was also a hub of social activity. Rodgers insisted that each club have rooms large and comfortable enough for such recreational activities as shooting the breeze, watching television, playing pool, or having small meetings. The club-asmeeting-place concept was vital to the success of the BAC system. Its social aspects reinforced the new pilot's decision to take up flying, gave him a sense of belonging, and provided his adventurous new activity with a necessary personal relevance.

As Rodgers is fond of saying, "Once a pilot has completed his training and received his certificate, it's absolutely essential for him or her to learn how light airplanes can be a practical and enjoyable means of travel.

"We've done a great job of training pilots," Rodgers adds. "But we're terrible at teaching pilots how to use their airplanes once they've earned their wings. The typical new pilot usually says to himself, 'Now what?' after getting his certificate, then drops out of flying. That's because unless the new pilot has a social



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framework to share his experiences and plan group flying activities, there's often no incentive to continue flying."

What that new pilot now needs, Rodgers believes, is a new, worldwide network of aero clubs to build and retain pilot participation, and a new type of attractive, high-quality trainer. The concept worked in the 1970s and early 1980s with the BACs and airplanes like the Skipper and Musketeer; at their high point in the late 1970s, there were 125 BACs and more than 8,000 pilot-club members.

Rodgers believes the same concept can work today. This time, Rodgers' idea for the commercial/social organizations is called the International Aero Club (IAC). His choice of a modern, two-seat fleet airplane is none other than the G115C.

Grob modified the old G115 to meet Rodgers' specifications, then assigned him the marketing rights to the airplane. Now he's on a campaign to establish the first IACs and demonstrate the G115C's merits.

Compared to its predecessor, the G115C is a much more capable machine and a natural design evolution. It has more power, carries more fuel, has a new panel and interior, and has even better visibility.

The most significant improvement is the engine. The G115C has the venera-



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ble 160-horsepower Textron Lycoming O-320; the original G115 had a 115-hp Lycoming O-235. Gone, too, is the G115's Hoffmann composite propeller, swapped for a metal Sensenich.

The extra power means that the G115C can cruise faster and higher, which fulfills Rodgers' need for an airplane with better cross-country capability. At 75-percent power and 6,000 feet, the G115C cruises at 124 KTAS, burns about 8.7 gallons per hour, and has a range (with reserves) of 330 nautical miles, according to the manufacturer's specifications. The original G115 had a 75-percent cruise speed of 108 KTAS and burned about 6.7 gph—but couldn't make

75-percent power much above 2,000 feet.

The old fuel system, which held only 26.4 gallons, is also history. In order to make the G115C fit more cross-country missions, usable fuel capacity has been upped to 40.1 gallons. The fuel load is split between two wing tanks, which is another change from the earlier model. In the G115, there was a single tank, installed in the fuselage.

Because of the extra fuel, the G115C's range is higher than that of its parent design (about 445 nm at 75-percent power versus the G115's 330-nm). The useful loads of the two airplanes— 683.4 pounds—are identical.

> The new Grob has the same basic airframe design as the original, but there are some notable enhancements. Most evident is the canopy's larger, two-piece window. Another change is the addition of a baggage area aft of the seats, a feature Rodgers wanted so that pilots could make brief overnight stays. Finally, the instrument panel was expanded to allow three-deep stacking of a full complement of IFR avionics. The engine instrument cluster, on the right half of the panel, has also been expanded. As

you'd expect, these gauges are high quality.

The professional look and feel of the cockpit is really second to none in the trainer market. There are four-point safety harnesses, comfortable seats, and that very impressive visibility—not to mention the overall ergonomic friendliness. However, the seats aren't adjustable; a thumb wheel on the floor allows you to adjust the rudder pedals.

After additional testing of the original design, Grob has assigned an airframe life-limit of 12,000 hours to the 115C. Coupled with Grob's five-year, 2,500-hour airframe warranty and the corrosion-free attributes of the allcomposite design, the airframe should live a trouble-free life, even in the toughest training environments.

Flying the G115C is a real treat. For our brief test flights, initial climb rates were in the 900-feet-per-minute range (ambient temperature was 85 degrees Fahrenheit), and the airplane trued out as advertised. Those larger canopy windows made visibility truly outstanding, even if it comes at the price of a toasty cabin.

Formation flying can be the acid test





Details like see-through wing inspection ports, new trim linkage, annunciators, and restraint systems reflect Grob's design philosophy.





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of an airplane's handling because so many control inputs are necessary when tucked in tight and turning. An airplane with heavy controls and sloppy responsiveness can make you work extra hard. The G115C's light feel and crisp handling made our photo mission a breeze. It takes only a light touch on the controls to bring about instant changes in position. With some other airplanes, it can feel like your control inputs go through committee before taking effect.

The airplane has all the merits a good trainer should. In slow flight or other high-angle-of-attack maneuvers, the Grob will drive home the need for right rudder. Power-off stalls produce a vigorous buffet. Power-on stalls are often accompanied by an attentiongetting, quite sharp drop of a wing.

Landings are as straightforward as they come, but the 115C pilot had better mind the airspeed. With such slippery lines, slowing to the 56- to 66KIAS (depending on weight) approach speed can be a chore if you barge into the pattern entry at low cruise. The electrically actuated flaps help a great deal on final, and for best effect, the slick Eppler airfoil calls for the full, 40degree flap deflection. With flaps up and power off, the G115 loves to glide.

As we go to press, the G115C is undergoing the final steps for U.S. certification. Utility-category approval is expected, and with it, the airplane will be approved for spins, lazy eights, chandelles, and steep power turns. A follow-on airplane—the G115D—is due to try out for aerobatic certification. The D model will have control sticks instead of yokes and a 180-hp Lycoming AEIO-360 engine.

But for now, Rodgers has enough of a job selling the 115C and the IAC concept. After a month-long campaign, Rodgers has so far taken orders for 10 115Cs. As for the clubs, two fixed-base operations have decided to come aboard: Pacific Sky of Santa Rosa, California, and Ronson Aviation of Trenton, New Jersey. Other FBOs, in foreign locations, have also indicated a strong desire to join the infant club network.

Rodgers says that both airplane and club receive an enthusiastic reception. "At every stop I make, people tell me they need airplanes like this and need a way to get more people involved in aviation," Rodgers stresses. "And they love the airplane."

Nobody knows better than Rodgers that general aviation has fallen on hard times. His is an uphill battle, to be sure. However, he has his first orders and his first two IACs. It's a tentative start, but it's also one of general aviation's more encouraging signs in the past few years.

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The way George Rodgers has it planned, each organization in the International Aero Club (IAC) network is headed up by a "Club Pro." The club pro is responsible for coming up with group activities, staying in touch with club members, and making sure that recurrent training is part of a member's club experience.

Though the G115C dubbed the "Bavarian"—is the IAC's airplane of choice, each club is free to select whatever airplane it deems appropriate. The IAC also endorses Frasca simulators.

The club pro need not be a pilot (though it would certainly help), but he or she must have the energy and the inclination to be the organization's main driver. An ideal club pro would be a flight instructor, or perhaps a retired person with an interest in aviation.

The club pro would also be responsible for the maintenance of a club's airport facilities and heading up membership drives.

As for each club's dues structure, projections are based on 20 members

JOINING THE CLUB

 per airplane. The initial payment to join an IAC is \$1,000 per active, certified pilot. Other membership cate and the La craft

join an IAC is \$1,000 per active, certified pilot. Other membership categories include training members (those working on their private certificates), who would be charged \$550 to join; associate members (those wanting to maintain basic VFR proficiency), who would pay \$100; and non-flying college or highschool students, who would pay \$45 to sign up.

Monthly dues would range from \$65 to \$85 for certified and training members. Associate and student members would pay no monthly dues.

Hourly rates for aircraft rental would be relatively low—just enough to cover gas, oil, insurance, and payments to an engine-overhaul and maintenance reserve fund.

In theory, the 20 active members would finance the \$20,000 down payment for a brand-new G115C, and the monthly dues would make the monthly payments on the rest of the note.

IAC signage and symbology would be provided by IAC's headquarters. This includes wall plaques, lapel buttons,

and insignia, which mainly represent the IAC's logo—a World War I–style aircraft roundel. The idea is that the airplanes in an IAC would bear the same roundels that its nation's aircraft wore during the world wars, as did Beech's aero clubs. —TAH