VALIANT VARGA

Stick and rudder and pleasure all under one canopy.

BY THOMAS B. HAINES

THE old adage about not judging a book by its cover holds true with airplanes, too. A few months ago, I flew the Polish-built Wilga 80 (see "Wilga 80: Pretty as a Pickle," September *Pilot*). Right from the beginning, I expected the unusual and ungainly airplane to be fun to fly. It looks so strange and cruises so slowly, I thought it would be like flying a Cub with a hormone problem. It

PHOTOGRAPHY BY MIKE FIZER

wasn't. For its utility role, the Wilga does a fine job, but the heavy control forces make it a real chore to fly. Sometimes, though, you *can* judge an airplane by its look. Enter the Varga Kachina 2150A. The Varga looks smart and smooth—easy on the eyes. It flies even better.

The comparison to the T–34 Mentor is obvious—an 85-percent scale model, perhaps. While the Varga, with a 150-horsepower Lycoming O-320 wedged in the cowling, lacks the horsepower of the Beech product, it nonetheless competes in the grins per gallon category.

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The Varga Kachina is George Varga II's rendition of the "Nifty," designed by William Morrisey back in 1948. Officially dubbed the Morrisey Model 1000, the Nifty originally was powered by a 65-hp Continental engine and had wooden wings and tail and a fabric-covered, steel-and-tube fuselage. The engine was soon replaced with a 90-hp Continental. He certified the airplane in late 1955, with a 150-hp Lycoming and with a new metal wing and tail. That airplane was called the Model 2000. The first delivery of a Morrisey airplane was in the form of a Model 2150 in July 1958. The 2150 included the 150-hp Lycoming, but it also had an aluminum-covered fuselage, rather than the fabric. Morrisey built 10 airplanes before selling a production license to Clifford Shinn in 1960. Shinn produced 35 airplanes, which he dubbed the 2150A. Varga bought the type certificate for the Model 2150 from Morrisey and the tooling from Shinn in 1967.

According to his son, George III, Varga built his first airplane in 1974 in Chandler, Arizona. The elder Varga named it Kachina, after the dolls made by the Hopi Indians. The colorful doll depicted on the Kachina's tail is of the sun god Tawa.

About 100 airplanes and 12 years later, financial difficulties forced Varga Aircraft Corporation to sell its assets. Part of the financial difficulties came from trying to certify 180-hp and tailgear versions of the airplane. Four 180-hp tailwheel airplanes were built, Varga reports. The bigger Lycoming was put in about 10 tricycle-gear airplanes, as well.

Montanair, Incorporated, located in Kalispell, Montana, now owns the tooling and type certificate. Co-owner Jeri Smith says she has no definite plans to produce the airplane or parts, though they have made a number of modifications to a prototype, which will be certified for aerobatics if it is put back in production.

Those interested in the Varga may want to subscribe to the *Varga Newsletter*, prepared quarterly by David Neumeister in Lansing, Michigan; telephone 517/882-8433.

Meanwhile, Morrisey has the type certificate for the original fabric fuselage Model 2000 up for sale. Those interested can contact him in Las Vegas at 702/735-6553.

The aircraft's tortured history is no reflection on the design and certainly not on the fit and finish provided by George Varga and company. As I quickly found out in flying a 1980 Varga belonging to Jon Falkner, the Varga is a true delight in every respect. This is one beautifully constructed airplane and an exercise in simplicity. Each side of the cowling folds up for easy access to the powerplant. By loosening a few screws, both sides of the fuselage between the fire wall and the wing leading edge can be removed to expose the landing gear area and wing root and spar.

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After stepping up on the left wing and folding the canopy back, Falkner adroitly slips a toe under the seat cushion and lowers himself into the front seat of N8417J, his years of practice evident. Behind him, I shuffle my feet trying to figure just which goes where for the proper rear pit ingression.

"It helps to be short," he remarks, acknowledging that the Varga isn't for everyone. In fact, if you're a speed freak or shop in the big and tall shop, look elsewhere; you'll be disappointed in the Varga. For those of us under six feet, the Varga's tandem seating arrangement can be downright roomy. Neither the seats nor rudder pedals adjust, though, and one must play the cushion shuffle to get things positioned correctly.

After we buckle the four-point harnesses, Falkner slides the canopy partly closed to the taxi position. The Lycoming spins to life, and Falkner pulls out of his driveway onto the grass strip that adjoins the property in front of his comfortable home in Transfer, Pennsylva-


N8417J


N8417J

nia, about 50 nautical miles north of Pittsburgh.

His rustic rancher is on Pleasantview Drive's cul-de-sac. He added what looks like a large garage with twin double doors shortly after he bought the house about three years ago. The post between the doors swings up, and he can push the Varga into the hangar. There's still room for the 'Vette, Cadillac, and two more vehicles. The private strip out front, Napodano Airport, is officially 1,500 feet long, but there's actually about 2,300 feet mowed. After a particularly grueling flight, one can relax in the pool out back and then climb into the hot tub. The whole place looks like it might have been ordered out of some "Pilot's Dream" catalog. Falkner is president and founder of Arctic Ice Company, just down the road in Sharpsville.

It seems we've hardly started to trundle across the grass when, with a tug on the stick, we're leaving the homestead behind. With a steep climb attitude and about 75 knots indicated, the Varga shows better than 1,200 feet per minute on the vertical speed indicator. With the two of us and mostly full tanks, we are more than 100 pounds below the 1,817-pound gross weight limit for Normal category. In the Utility category, the limit is 1,570 pounds. With a full 17.5 gallons of 80 octane or 100LL in each wing, the Varga still has payload for 482 pounds of people and bags.

After leveling off about 1,500 feet above western Pennsylvania's rolling hills and backing the power off to 2,300 rpm, I take a minute to get the feel of the control forces. Only a minute is needed because the stick feels so natural in the right hand, left hand on the throttle. Why don't all airplanes come this way?

The ailerons and elevators are connected to the stick through torque tubes, making their responses very smooth and linear. Rudder control is via cables. When extended in flight, the nose gear strut disengages from the rudder, making the pedal controls very light. The airplane nimbly reacts to even the gentlest control inputs, yet it does not seem twitchy. In steep turns, the urge is there to roll the airplane on over. That's a no-no because the Varga is not certified for aerobatics. Throughout its flight envelope, the Varga offers no surprises. Stalls are more of a porpoising affair than a screaming fall from the sky.

I roll back into level flight and twist my neck around in search of bogeys. The plastic canopy provides an unobstructed 360-degree view. My thumb instinctively moves to the black button perched on top of the stick. I push it, expecting a volley of bullets and tracers to stream out ahead; instead, I hear a click in the headphones and am snapped back to reality as Falkner reminds me about the microphone switch. N8417J came with an intercom, a wise choice. The expanse of plastic promises noise, and when the owner pops open the canopy after slowing the airplane to about 75 knots, the need for headsets becomes even more obvious. The open canopy causes little change in performance and none in handling, but say good-bye to any charts not tucked away.

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The elevator trim control, which looks like a window crank from a 1961 Chevy Impala, is located on the left side of the fuselage almost between the seats and within reach of each pilot. There is no rudder trim.

Each driver has his own carburetor heat control, stick, and throttle. Only the front-seat pilot can access the floor-mounted flap lever, which puts out 15 degrees on the first pull, 30 degrees on the second. The flaps do little to slow the airplane down, though. The Varga pilot must learn to slip, Falkner advises. He later demonstrates the procedure at a nearby airport, sending the airplane down the glideslope at about a 45-degree crab angle. Just over the numbers, a quick flick of the wrist and a kick on the opposite rudder straightens the airplane out, and it settles easily onto the pavement, stopping in about 1,000 feet.

Opposite of most airplanes, if you can get the Varga into a field, you can get it out, Falkner says. Takeoffs in 600 feet are easy, even from grass. The landings, though, take a bit more finesse and runway. The key on the approach is to keep the speed above about 70 knots. At slower speeds, the Varga sinks rapidly.

The rear pilot must poke his head over the shoulder of the guy up front to get a good look at the instruments, but aside from the airspeed indicator for takeoffs and landings and the engine gauges, one can fly the Varga from the back seat with only an occasional look over the front pilot's shoulder. Solo flights are made from the front.

Falkner's airplane is nicely equipped for instrument flying, though he is a VFR pilot. It is very stable, particularly in roll, and would make a fine instrument platform.

The panel was redesigned just before he purchased the airplane in early 1988. The previous owner bought the airplane new in 1980 and put just 200 hours on it. Falkner, frequently accompanied by his wife or a friend, has added almost 250 hours. To look at N8417J, one might believe it only yesterday rolled off the production line. The paint, interior, and panel are immaculate.

Falkner uses the airplane to airport-hop around western Pennsylvania and eastern Ohio and for occasional trips to Florida, St. Louis, and Arkansas.

With a cruise speed at 75-percent power of about 105 knots true, the Varga can make long work of long trips, but for shorter hauls, it is a pleasure to fly. There are times for a station wagon, and there are times for a sports car. Speed aside, the Varga equates to the sports car. Part of the reason for the less than blistering speed is the blunt nose cowling, reminiscent of that on the Cherokee 140s. And though the air-

plane looks small, the fuselage is quite wide. One can easily sit sideways in the rear seat. Morrisey had plans to produce a four-place version of the Model 2000. To do that, he was intending to increase the width by only 4 inches. Falkner soon plans to add wheelpants to his main gear and hopes for 5 knots more speed.

According to the *Aircraft Bluebook–Price Digest*, expect to pay about $20,000 for a late-1970s Varga in nice condition, but because there were only about 150 built, including the Shinn and Morrisey versions, don't expect to find a big selection. A 180-hp Varga 2180, which cruises at about 115 knots, will fetch about $25,000.

A Cessna 152 of the same vintage will cost about the same and offers a similar cruise speed on 40 fewer horsepower. The Varga 2150A, though, has a much better climb rate and visibility. For those wanting a two-seater that's a little more fun to sport around in than your average trainer, the Varga Kachina 2150A and its predecessors fit the bill nicely. □

Varga Kachina 2150A

Base price, new, 1979: $21,950
Current average retail: $20,000

Specifications

Powerplant	Lycoming O-320-A2C, 150 hp
Recommended TBO	2,000 hr
Propeller	Sensenich, 74-inch, two-blade, fixed-pitch
Length	21.2 ft
Height	7 ft
Wingspan	30 ft
Wing area	144 sq ft
Wing loading	12.5 lb/sq ft
Power loading	12.11 lb/hp
Seats	2
Empty weight	1,125 lb
Gross weight	1,817 lb, Normal; 1,570 lb, Utility
Useful load	692 lb
Payload w/full fuel	482 lb
Fuel capacity	35 gal (34 gal usable) 210 lb (204 lb usable)
Oil capacity	8 qt
Baggage capacity	50 lb

Performance

Takeoff distance over 50-ft obstacle	440 ft
Rate of climb, sea level	910 fpm, Normal; 1,215 fpm, Utility
Max level speed, sea level	117 kt
Cruise speed/endurance w/45-min rsv, std fuel (fuel consumption)	
@ 75% power, best economy 7,000 ft	105 kt/3.8 hr (45 pph/7.5 gph)
Service ceiling	22,000 ft
Landing distance over 50-ft obstacle	450 ft

Limiting and Recommended Airspeeds

Vy (best rate of climb)	78 KIAS
Vfe (max flap extended)	80 KIAS
Vne (never exceed)	147 KIAS
Vs_1 (stall, clean)	50 KIAS
Vso (stall, in landing configuration)	45 KIAS

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, sea level, gross weight conditions unless otherwise noted. □