



Wilga 80

PRETTY AS A PICKLE

A utilitarian with the looks to prove it

BY THOMAS B. HAINES

THE gear description is a matter of semantics. The Polish-built Wilga carries "conventional" landing gear in that the third wheel is in the rear. But the landing gear, like everything else about the airplane, is unconventional. The main gear, cushioned by plump tires, attach to a pair of gas- and fluid-filled shock absorbers as big around as your arm. The absorbers and tires are knuckled to the main strut at a 45-degree angle, similar to trailing-link gear, but then not really like a trailing-link gear at all. Like everything about the unusual Wilga, the landing gear is hard to describe.

AOPA Pilot Editor Seth B. Golbey and I compared notes

PHOTOGRAPHY BY MIKE FIZER





rather than a traditional electric starter. Once the engine is started and the smoke has cleared, flying the Wilga is much like flying a heavy Cessna 180.

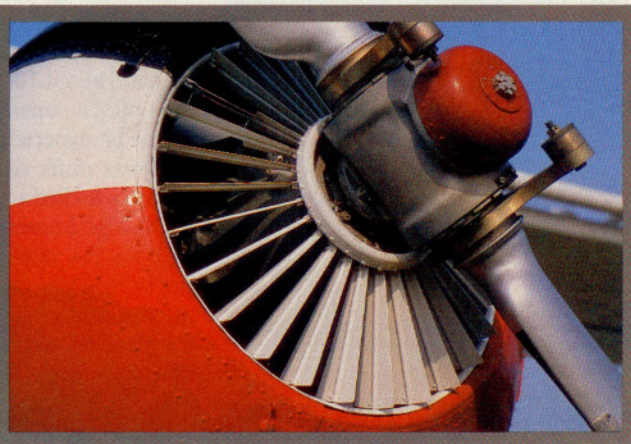
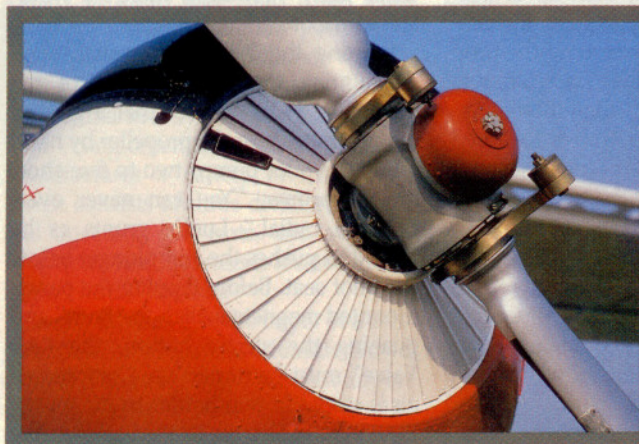
The key word here is heavy. The hefty control stick ought to serve some warning about the forces necessary to move the Wilga's corrugated ailerons and elevator. Rudder control, however, is much lighter, and finding the right combination between stick and rudder pressures can be challenging. The throttle and propeller levers also are stiff, but you

can receive some help here from the right seat, as there are dual throttle and propeller controls.

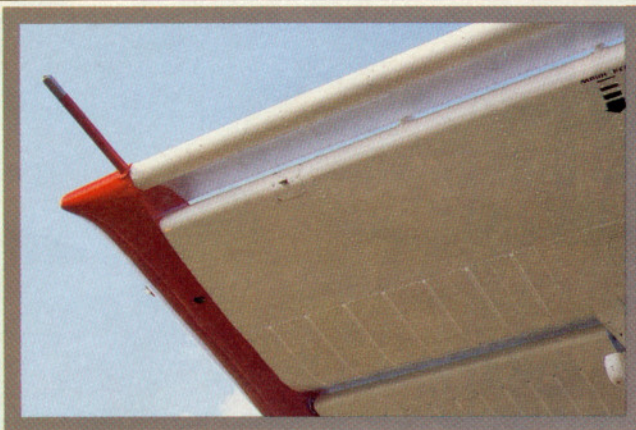
The aircraft never feels out of control or unmanageable, though. And at 75-percent power and a cruising speed of 90 knots, you seldom feel the airplane is ahead of you. Cruise speed is set by putting the manifold pressure gauge on about "8," which converts to about 24 inches of manifold pressure. The prop is pulled back to about 2,400 rpm.

Takeoff is accomplished with one

notch of flaps—21 degrees. The flaps are controlled by a pipe lever about the diameter and gauge of one you might use to support a clothesline. The handle is located above and to the left of the pilot's head, and the mark of a good Wilga pilot is the ability to work the trigger on the lever and pop in a notch of flaps without a pitch excursion. Dropping the second notch of flaps in allows you to drive the Wilga around the sky at speeds as low as 55 knots. Helping the low-speed control are the ailerons,



A few turns of a doughnut-sized knob in the cockpit open the cooling shutters in front of the burly nine-cylinder radial engine.



Fixed slats on the leading edge improve low-speed handling and short field performance. Stumps and rocks pose no problems for the hefty gear struts.



which droop with the addition of flaps. With the power pulled back, one notch of flaps in, and about 70 knots indicated, Lundy and I raced a couple of cars on the interstate below. We usually won, and we didn't have to worry about the radar detector going off.

The sight of the Wilga, though, may frighten most drivers into speeding up. The corrugated metal fuselage skin increases strength and adds to the aircraft's utilitarian look. A fixed leading-edge slat runs along the full span of the 36.4-foot, constant-chord wing, providing remarkable short-field performance and slow-flight stability. The book says the takeoff run on grass is 365 feet, and the landing roll is 509 feet, though only a pilot experienced in the Wilga can hope to get the aircraft into fields that short. Less experienced pilots will find the Wilga a handful on landing.

As an example of the Wilga's utility capabilities, each comes with a tow hook, releasable from the cockpit, and the airplane can tow as many as three gliders at once. Under the floor of each aircraft is a 12-inch camera porthole. The two cabin doors come off and in fact can be jettisoned in an emergency. The

right side of the fuselage has a hook for parachute static lines. The wide right step is designed to accommodate jumpers. The right front seat can be reversed to carry a jumper. The two rear seats are replaced with a bench to host two more parachutists, though our experience shows that those in the rear during flights with the doors off ought to wear hearing protection. There is no cockpit speaker, so the pilot must use a headset, which is advisable for hearing protection, especially with flight sans doors. According to the POH, the certified noise level of the Wilga is only 68 decibels. A two-blade Piper Saratoga, by comparison, makes 76.7 decibels. The Wilga is relatively quiet as heard from the ground, thanks to the large mufflers, but to those in the cockpit, it is no quieter than most aircraft of similar size and horsepower.

Priced at \$79,500, the Wilga can fill many niche markets that less expensive, smaller aircraft and more expensive, larger aircraft can't fill, Lundy believes. Besides the aforementioned, he says the airplane is ideally suited to operations off dirt paths for ranch work and maybe even as an air ambulance into unim-

proved strips. With the rear seats removed, a gurney can be slid into the tailcone. An attendant could sit in the rear-facing front seat. The Wilga 80 is not certified for spraying, but Lundy believes a belly tank and spray equipment could be added for less than \$8,000. He may seek certification of such a model once a market survey is completed. The Wilga already is certified on conventional skis, retractable skis, and floats in Canada and in Europe.

Though relatively unknown here, the Wilga is a success in such roles throughout Europe. Pezetel has built around 900 Wilgas. The aircraft started out life as the Wilga 1 in 1962. The Wilga 35 was more widely produced than the early versions, but it was never certified in the United States. The improved Wilga 80 received U.S. certification in 1982, but none was imported until recently. The biggest difference between the 35, which is no longer in production, and the 80 is the strengthened wing spar in the 80. There are about a dozen

Wilga 35s in the United States operating on experimental certificates. Only about four 80s are in this country.

Lundy reminds that about one in seven aircraft in the world was built by Pezetel, though the name is virtually unknown here.

The Wilgas are assembled and test flown in Poland and then disassembled for shipment to this country. The containers arrive for reassembly at either Malden, Missouri, or Melex's new facility at Johnston County Airport, south of Raleigh-Durham International Airport.

Lundy explains that the biggest fear most potential customers have about a foreign-built aircraft is support. Melex carries about \$3 million in parts for the Wilga and another Pezetel product, the Dromader, he says. The Dromader is a 967-hp, radial-powered agplane. About 600 Dromaders have been produced, and Melex supports the 70 of them in the United States. Parts are shipped out overnight. Melex has a seven-year supply of some parts, according to Lundy, in order to assure an ample stockpile for any situation.

The coming of democracy to Poland and other parts of Eastern Europe has



had many effects on how the factories are managed but little on the final product. The Poles see aircraft and engine sales as big moneymakers, and they realize that continued support is a necessity, Lundy says.

The airplane itself may not be handsome, but the \$79,500 price tag is attractive for such a versatile, powerful, and large aircraft. Still, the factory recommended time between overhaul published in the POH might scare off prospective buyers. TBO for the Wilga airframe is 1,000 hours, and the airframe service life is limited to 2,400 hours, according to the POH. However, the factory recently increased the TBO to 2,600

hours, and then, after changing some wing-attach fittings, the airframe is good for another 2,600 hours. Those limits will be extended as experience with the fleet increases, Lundy says. The recommended engine TBO is 1,000 hours, though 1,200 hours can easily be reached, according to Lundy. The propeller blade service life is 1,000 hours or five years, whichever occurs first.

The Wilga, then, isn't just another pretty face; in fact, it's really not pretty at all, but it can be an outstanding value for the operator in need of its unique talents, and today's buyer most certainly will be the first on his airport (or in his state) to own one. □

PZL-104 Wilga 80

Base price: \$79,500

Specifications		Performance	
Powerplant	PZL-KALISZ AI-14RA, 252 hp	Oil capacity	6.1 gal
Recommended TBO	1,000 hr	Baggage capacity	60 lb
Propeller	104.4-inch, two-blade, constant-speed	Takeoff distance, ground roll—grass	365 ft
Recommended TBO	1,000 hr	Takeoff distance over 50-ft obstacle	800 ft
Length	26.3 ft	Max demonstrated crosswind component	12 kt
Height	9.6 ft	Rate of climb, sea level	1,030 fpm
Wingspan	36.4 ft	Cruise speed/endurance w/45-min rsv, std fuel	
Wing area	166.8 sq ft	(fuel consumption)	
Wing loading	17.18 lb/sq ft	@ 75% power, best economy	88 kt/2 hr
Power loading	11.4 lb/hp	3,000 ft	(99 pph/16.5 gph)
Seats	4	@ 60% power, best economy	79 kt/2.6 hr
Cabin length	9.8 ft	5,000 ft	(81 pph/13.5 gph)
Cabin width	3.3 ft	Max operating altitude	14,000 ft
Cabin height	3.3 ft	Landing distance over 50-ft obstacle	850 ft
Empty weight	1,885 lb	Landing distance, ground roll—grass	509 ft
Gross weight	2,866 lb	Limiting and Recommended Airspeeds	
Useful load	981 lb	Vx (best angle of climb)	57 KIAS
Payload w/full fuel	711 lb	Vy (best rate of climb)	62 KIAS
Max takeoff weight	2,866 lb	Vfe (max flap extended)	80 KIAS
Max landing weight	2,866 lb	Vne (never exceed)	150 KIAS
Fuel capacity, std	45 gal (44 gal usable)	Vs1 (stall, clean)	57 KIAS
	270 lb (264 lb usable)	Vso (stall, in landing configuration)	51 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.

For more information, contact Melex USA, Incorporated, 1221 Front Street, Raleigh, North Carolina 27609; telephone 919/828-7645. □