

Monsun (Technical Data)

Performance	150 Lycoming	160 Lycoming (fuel-injected)
Never exceed speed	173 m.p.h.	173 m.p.h.
Maximum speed, SL	160 m.p.h.	170 m.p.h.
Cruising speed (75%, 6,100 feet, m.s.l.)	146 m.p.h.	160 m.p.h.
Rate of climb, SL	1,040 f.p.m.	1,180 f.p.m.
Service ceiling	16,400 feet	17,000 feet
Takeoff roll	620 feet	590 feet
Landing roll	660 feet	660 feet
Range, without reserve	540 miles	648 miles
Fuel capacity	39 gals.	39 gals.
Specifications		
Length	21.6 ft.	
Height	7.3 ft.	
Span	27.7 ft.	
Empty weight	1,045 lbs.	1,067 lbs.
Fuel and oil	236 lbs.	236 lbs.
Baggage, parachutes and additional equipment	187 lbs.	165 lbs.
Two occupants	340 lbs.	340 lbs.
Max. gross weight	1,808 lbs.	1,808 lbs.

Baby Messerschmitt

by JOHN PENNINGTON / AOPA 155101

The new Monsun, fresh from Germany, causes a stir when it makes U.S. debut at Atlanta, Ga. Two models—150 h.p. and fuel-injected 160 h.p.—are flown for report to PILOT readers. Deliveries expected to start in July

■ ■ “Which one you want to fly?” Whitey asked.

They sat there gleaming in the Sunday afternoon sun, one trimmed with orange, the other with blue, cocky little crowd-pleasers, their canopies invitingly back.

“Suppose I take the 150 first?”

“Okay,” Whitey said. “You want to fly by yourself?”

The orange one had the 150 Lycoming, the blue one the 160 fuel-injected Lycoming. I started to climb up on the wing of the orange one and noted the sign at the flap’s trailing edge: “Nicht betreten.” I stepped over that and climbed in. “Rauchen verboten.” A panel injunction against smoking, I would have guessed. The carb heat was labeled “vergaservorwarnung.”

“I think an interpreter would be in order,” I told Whitey. “Somebody to help figure things out.”

Dave Forrest, who flies P-51s and other World War II relics for fun, climbed in the right seat. He disqualified himself as an interpreter—he couldn’t read German either—but he had flown the baby Messerschmitts already and had figured out what everything meant. Soon we were ready to go full rich, position the throttle at the white mark on the power console, flick the “haupt schalter” to the “ein” position, yell clear in English, and twist the key for a normal start on the Lycoming O-320.

With the canopy back, the power came on with a throaty, tigerish purr. Imagined or real? “They don’t have

mufflers yet,” Whitey explained. “They’ve got straight pipes.”

Thus began a session of flying the first two models of the Messerschmitt-Bolkow-Blohm BO-209 *Monsun* imported to the United States, each with less than 10 hours on the tach. The importer was Whitey’s Aircraft Sales, Inc., at DeKalb-Peachtree Airport, Atlanta, Ga., and Whitey Moore was the trusting fellow in the blue and white airplane who had offered to let me fly solo, first time out, in the *Monsun* (pronounced “monsoon,” and intended to mean that the airplane will go like the wind.)

Before we started, Whitey suggested that we fly from DeKalb-Peachtree to Callaway at LaGrange, which has no control tower. The airplanes had just arrived in this country, with no radios installed. Whitey had a portable transmitter in the 160 model and he would do the talking for both of us. (“Peachtree Tower, this is Messerschmitt Delta Echo Kilo Whisky Alpha. Over.” “Uh, Whisky Alpha, uh, say your aircraft type again.”)

Some first impressions on the ground:

The *Monsun* draws a crowd wherever it stops. People walk around it, peer inside, caress the kind of exterior finish you would find on a Porsche or Mercedes-Benz. The bubble canopy slides back to reveal two bucket seats, side by side, and a spacious baggage compartment behind them (open to the occupants in flight, capacity 120 pounds). A double shoulder harness swings into the baggage area when not in use. The

seatbelt and harness snap into a circular holder that looks like a blue and silver yo-yo, and, with the flick of a lever, opens up like a clamshell to lock or unlock the belts. A divider runs back and down from the power console, between the two seats. It holds, moving back from the throttle quadrant, flap switch and indicator, handbrake and brake lock, trim and fuel tank selector (left, right or off). If one uses throttle and brake at the same time, it requires a certain dexterity; throttle in the left hand, brake in the right.)

Now back to what is really the first thing you notice when you climb up on the wing and look in. No control wheels. Sticks instead. Two sticks with solid rubber handles curve with a flourish out from under the seats, suggesting more than cross-country for this machine.

The panel is standard. The Kollsman instruments are in English (Italian design) and positioned where the pilot would expect them to be. (Customer deliveries won’t require a translator; they’ll be all-English.) The master switch is adjacent to the power levers, with a light that comes on and stays on when the switch is activated. Ignition is at lower left, turn to start. Engine instruments and fuel gauges are between master and ignition. Tachometer, and in the 160, manifold pressure/fuel flow also, is directly above the throttle.

To the right of the throttle is a row of six light-touch switches. Push one and it lights up and it’s on. Push it again, it goes dark and it’s off. They



The 150 h.p. *Monsun*. Note the faired nosewheel on 160 h.p. model retracts.

control auxiliary fuel pump (on for takeoff and landing), electric turn and bank, pitot heat, rotating beacon, position lights and landing light.

We taxi to Runway 20R. Messerschmitt Delta Echo Juliet Whisky Hotel steers smoothly, turns in a tight radius. Rudder steering is a bit stiff and you can feel the rudder bars firmly through soft-soled shoes.

Runup, fuel pump on, T&B on, beacon on, canopy closed. The canopy slides easily, locks with a twist of the wrist, the same action as the folding sunroof on my old VW. A small side vent opens on the ground or in flight.

Now, thumbs up to Whitey, who is carrying on a guttural dialogue with the tower, and we're ready to go. The blue 160 rolls out first, the orange 150 follows.

Dave Forrest looks perfectly relaxed in

the right seat as I ease the throttle forward, squiggle a bit by overcontrolling the nosewheel, and wonder out loud that a stick feels peculiar in the left hand. Dave said he preferred to fly the *Monsun* from the right seat, so the stick would be in his right hand, throttle in his left. Later, flying for air-to-air pictures, he did fly from the right.

On the ground, even at fast taxi, the elevator on the *Monsun* is lifeless, the stick limp as an embarrassed handshake. But as the plane nears liftoff speed—50 knots—the stick and elevator come to life.

The Italian-design airspeed indicator is in knots, with the zeros dropped, and the needle starts at the left side of the instrument instead of the top. It is clean and easy to read.

The book figure for takeoff roll is 620 feet for the 150 and 590 for the 160.

We were at 1,050-foot elevation and our roll appeared to be about as advertised for the occasion.

We followed the blue and white airplane for a short while, but it had retractable nose gear—yes, retractable nose gear—and the 150 didn't. This, plus the extra 10 horses, soon put Whitey out of sight. We flew southwest at 2,000 m.s.l., skirting the edge of the Atlanta TCA, and followed the winding Chattahoochee River, which afforded a good opportunity to sample control response, which is immediate.

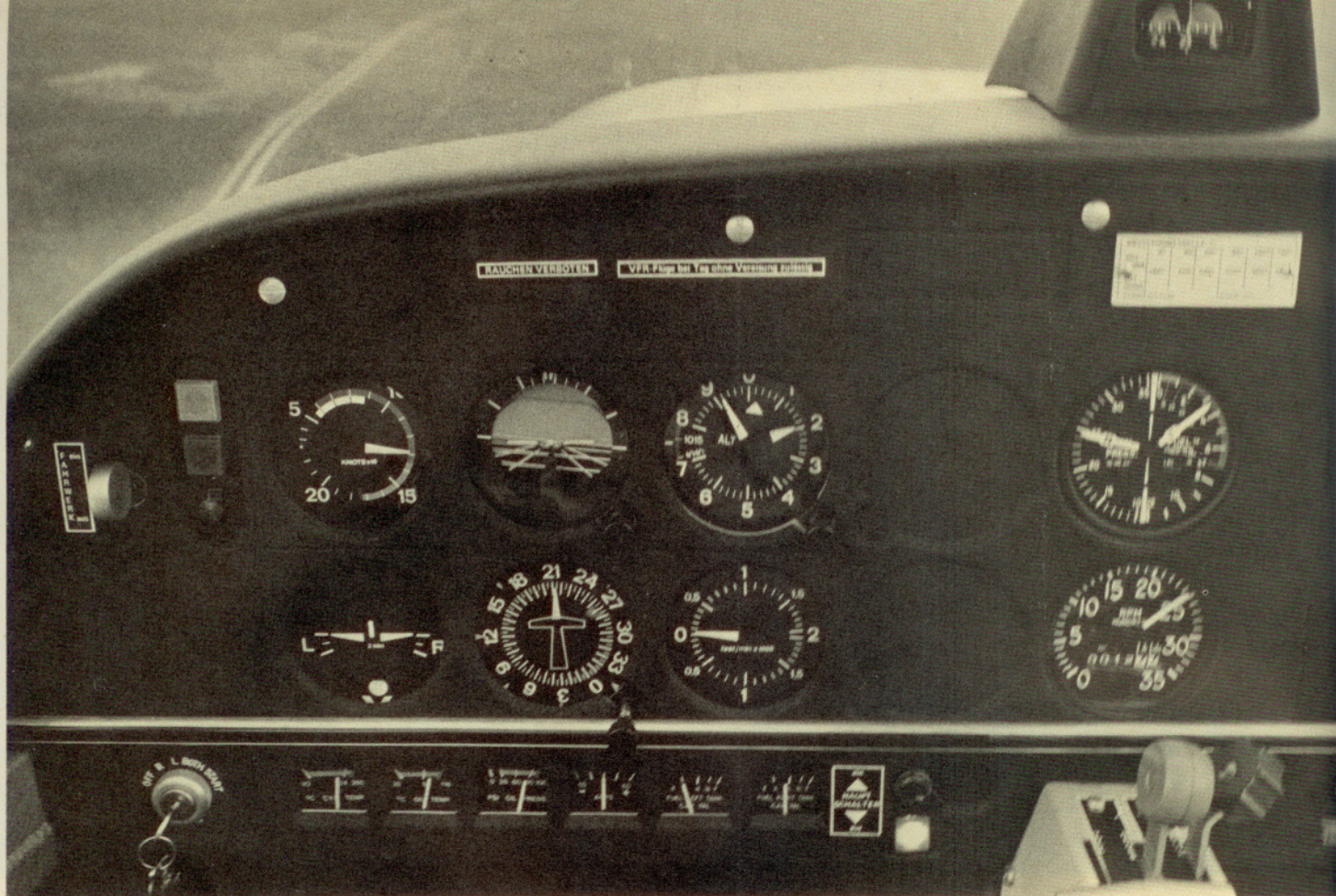
Move the stick and the airplane moves. Control forces are firm but not heavy. You can start a turn almost by thinking about it, stop one the same way. The stabilator with anti-servo tab for trim control is intensely responsive to stick motion. The stick is similarly responsive to the trim: Roll the trim wheel and you feel the stick move in your hand.

In smooth air the *Monsun* gets on the step and holds position well. In rough air it hunts a bit but remains stable.

Visibility from the cockpit is almost total in every direction except down, since you're sitting in a tinted bubble. The noise level in the unmuffled planes



The 160 h.p. *Monsun* in flight over west Georgia. Dave Forrest is flying from right side so the control stick is in his right hand. The nosewheel is retracted, giving the plane 6½ to 7½ m.p.h. extra speed.



Instrument panel of the 160 Monsun. The master-switch light is at the right, near the throttle quadrant; the gear switch and lights are at the top left. Gear is up in this photo and the plane is indicating 130 knots (150 statute) at 1,920 feet.

we flew was a bit high, so that voices had to be raised for conversation. There's plenty of room. Dave and I, both sort of wide at the shoulders, had plenty of space without bumping each other. The top of the canopy is a bit close to the head of a six-footer, so that in rough air he would want to tighten the seatbelt and harness, and perhaps let the seat forward a bit to coincide with the highest point of the canopy.

On the ground I had noticed that the *Monsun* has a tailskid. Landing at LaGrange, I found out why.

Approach is at 75 knots. Flaps may be lowered at 88 knots, 15° for approach, 35° (full) for landing. It stalls, according to the book, at 54 knots with the flaps down, in practice at about 50. Landing is where you really fall for this airplane. It holds trim speed nicely and you don't have to be a weightlifter to get the stick back on flare. It comes back nicely, smoothly, with feel and sensitivity translated into attitude.

Touching down with a beep of the stall horn, I pulled the stick back all the way to get a nose-high rollout and felt the tailskid bump the runway. The bump sent the nose down, which increased lift on the wing, which put the nose back up, which increased the angle of attack and dissipated lift, which finally let the nose back down again.

At LaGrange, we swapped airplanes. Dave went out with me the first time in the 160 with the retractable nose-wheel, and then I took it solo.

The main difference between the 150

and the 160 is the way you start them and how fast they go, plus, of course, the constant-speed prop in the 160. The working numbers are the same. For a hot start in the 160 with fuel injection, mixture is lean, master switch on, ignition on, turn to start, forward on the mixture and you're running.

That retractable nose gear is something else. It is electrically operated by a gear switch, in the upper left corner of the panel, with three lights: orange, which flashes when the power is reduced to 15 inches and the gear is up; red, which comes on when the gear is in transit; and a green, down-pointing arrow which lights up to signal that the wheel is down and locked. The nose gear may be lowered at 104 knots.

Tucking away that single wheel of the three on the *Monsun* provides an increase in airspeed, according to the airplane manual, from six-and-a-half to seven-and-a-half nautical miles per hour, depending on altitude and power setting. I flew the 160 at 3,000 feet with 75% power, first with the gear down, then up. As best as I could determine in rough air, I picked up seven or eight knots with the nosewheel up.

The 10 extra horses and constant-speed prop, standard with the 160 model, add another 14 m.p.h. The manual rates the 160 h.p. model at 138 knots (160 m.p.h.) at 6,000 feet with 75% power. With the same power and altitude, the 150 h.p. model produces 127 knots (146 m.p.h.). This is with retractable nose gear in both in-



Whitey Moore of Whitey's Aircraft Sales of Atlanta, *Monsun* distributors.

stances.

I didn't take either of the baby Messerschmitts up to optimum altitude, 8,200 m.s.l., but tested the 160 against the book at 3,000 feet. With nosewheel up and 75%—24.5 inches manifold and 2,400 r.p.m., we indicated 180 nautical for a true airspeed of 158 m.p.h., indicating a conservative manual. Essentially one mile per horsepower on 10 gallons per hour. The 150 h.p. model also equaled or bettered manual figures at low altitudes.

Maximum rate of climb for the 160, according to the manual, is 1,472 f.p.m. at utility category weight, at an air-speed of 75 knots, and 1,138 f.p.m. at gross and 81 knots. With about three-fourths fuel and a 74-pound, 12-year-old copilot aboard, we climbed at 1,200 f.p.m. This puts the nose uncomfortably high and interferes with forward visibility. With the airspeed at 90, the climb rate was 800 f.p.m. and at 100, it was 600 f.p.m., both more comfortable.

Stalls are gentle and not easily achieved. With flaps up or down, with or without power, the airplane rocks gently into and out of the stall with no pitching or rolling, and it is necessary to get the stick back in the gullet to convince the *Monsun* you really want a stall.

As suggested earlier by the presence of the sticks instead of wheels, the *Monsun* is aerobatic. At gross weight,

I also made another discovery after the second solo takeoff. The airplane is so sensitive in the lateral sense that with one aboard, on liftoff, it lists slightly to the side you're sitting on. About an ounce of pressure, it seems, corrects that and away you go, burning fuel off that side first to perfect the balance.

The airplane, without any tricks, will give you 110 miles of leeway between stall and best cruise, a pretty good span for 160 h.p. or, if you prefer, an afternoon of gyrations. The *Monsun* leaves one with the firm impression that it is a fun machine.

The next logical question is: How much is all this fun and cross-country for two going to cost, and how much load does it carry?

The load first: The *Monsun* is an honest two-place airplane. Empty weight is 1,045 pounds. Oil and fuel—39 gallons for 566 miles in 3.86 hours; no re-

monoplane using plastic components to a limited extent. The trapezoidal wings, provided with integral fuel tanks and reinforced fiber-glass tips, can be folded back to the ground . . ."

The wing-folding process—or unfolding if you're going the other way—takes about 30 minutes, Whitey says. You zip off a small fairing, negotiate a few disconnections, hook up to your automobile, retract the nosewheel and away you go, causing double takes. Whitey says the connections are sturdy, simple and foolproof. He volunteered to fold the wings on one of the planes for me, but I declined, preferring airplanes with their wings in the go position.

The *Monsun* has certain distinctive features that one quickly notices on a walk-around. The fuel caps are flush with the skin of the wing and are opened with a little hatchlike tool that comes in the tool kit that comes with the airplane. The wings are swept up at the end. The landing gear is spring steel. The fuselage is a tapering square from the canopy back to the stabilator. A dorsal fin runs all the way from the tail to the cabin, and, in fact, serves as a track for the canopy, which is tinted. The rudder has a squared trailing edge, and so does the stabilator.

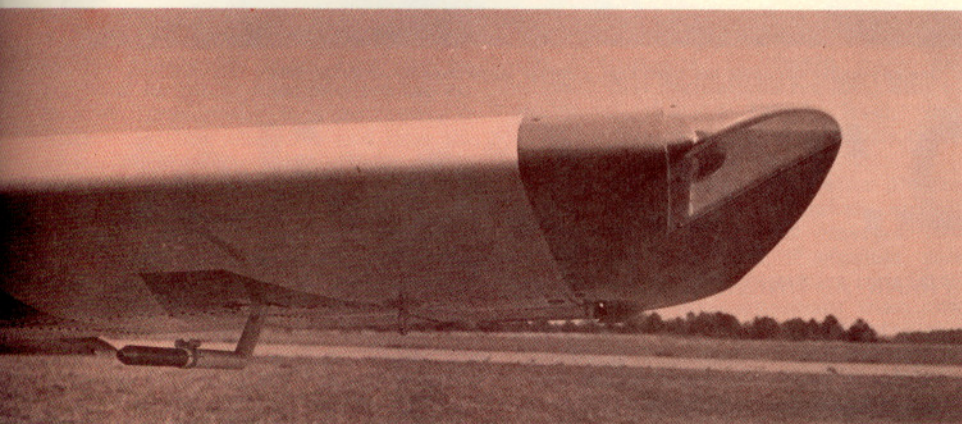
The baby Messerschmitt came to the United States by way of Atlanta and Whitey Moore's stable because Whitey heard about the airplane, was intrigued by it, tracked it down, visited the factory at Munich, and became a distributor. He (or the factory) advertised the *Monsun* in *The AOPA PILOT* and was overwhelmed by the response. Whitey got so many requests for information that he ran out of literature and had to hurriedly print some temporary material.

Whitey's Aircraft will have the airplane for customer delivery with English markings and U.S. registrations and FAA type certificate in July. He said at the time that we flew the planes that he was taking orders for September deliveries. He will get seven or eight planes a month initially.

Recognizing the great interest in the airplanes, Whitey is scheduling a series of appearances with them—the air races at Cape May, N.J., June 4-6; the Reading Air Show (perhaps with German aerobatic pilots) June 8-11; the Reno air races, the Santa Ana, Calif., air show and, naturally, the AOPA Plantation Party at Las Vegas in October. □

THE AUTHOR

John Pennington, a member of the editorial staff of the *Atlanta Journal-Constitution Sunday Magazine*, is a frequent contributor to *The PILOT*. His most recent articles for us were "Vortex In Court" [Oct. 1970 *PILOT*] and "A Hundred Things You Have Not Dreamed Of . . ." [Feb. 1970 *PILOT*].



Upswept fiber-glass wingtip, common to both *Monsun* models. Photos by the author

1,808 pounds, it is normal category with no aerobatic maneuvers or spins approved. At 1,565 pounds—243 less than gross—it is utility category and approved for spins, chandelles and steep turns up to 60°. Add an accelerometer and the airplane becomes legal for slow roll, wing-over, loop and turns as steep as desired.

One pilot who did aerobatics in the 160 said the airplane performs well, but he found it a bit soft at the top of the loop. One afternoon, after the two airplanes had drawn an audience on the ground, two pilots took them up for an impromptu dogfight and proved their ability in unusual attitudes.

The *Monsun* makes landings seem easy. After about the third landing, I stopped bumping the tailskid. With the stick held back evenly, the nose stays up for part of the landing roll and then, as speed dissipates, the elevator goes slack again and the nose drops of its own accord.

Also after about the third landing, I began to get the real feel of the baby Messerschmitt. You know, touch it down gracefully, roll it out nose up, turn onto the taxiway and slide the canopy back to catch the wind in your face, and feel good about flying an airplane that wants to do what you want it to do.

serve—add 236. This leaves 187 pounds for baggage, parachutes and extra equipment, and 340 pounds for two occupants.

Base price for the 150 h.p. model is \$13,900. Base price for the 160 h.p. model, with fuel injection and constant-speed prop standard, is \$15,900. There is a 125 h.p. model for \$12,900. To these prices must be added an additional \$1,650 for freight and duties.

From there you can add the options. The electrically retractable nose gear is \$542. Fairing for the nosewheel, if you don't choose to retract it, is \$119. Also add full panel and towing equipment—yes, the wings fold so you can take your *Monsun* home with you—and all of the desirable extras, excluding radio, will run about \$5,000. Add radio and you have the cost of a fully equipped *Monsun*.

The Messerschmitt has a noble ancestry. The fabled Me-109 first flew in 1935. It fought in Spain in 1937 and later in World War II. Martin Caidin wrote in "Me-109" that it was "probably the most consistently great aircraft in aviation history."

The BO-209 is no Me-109, of course, but it is a handsome little airplane from an experienced producer of aircraft and its performance indicates a kinship to its predecessor. The manual says it is "a two-seat cantilever low-wing all-metal