Fun with a Maule

Maules do the darnedest things!

BY ALTON K. MARSH

Maules have more fun. The 235-horsepower MT–7-235 (the T stands for *tricycle gear*) and its close cousin, the M–7-235 that is mounted on floats, skis, or conventional gear, are used for a variety of adventurous assignments nationwide. A recent check shows these aircraft tracking wild animals in the Northwest, towing gliders for the Civil Air Patrol, and providing commercial seaplane transportation in Florida and the Bahamas.

Maule is famous for the budget prices of its new airplanes, but this is the higher end of the line where prices reach between $160,000 and $200,000. Compare what you get for what you pay, though, and you'll see Maule stands up well to the competition. But back to the fun issue.

PHOTOGRAPHY BY MIKE FIZER


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Clean lines and a sharp paint scheme help show off this Maule and win praise from its owner. The second door literally opens up the interior. Much appreciated by the author is the skylight that aided in the formation flight for the photo on the previous page.

One of the floatplanes is operated by Safari Seaplanes in Nassau, Bahamas, a charter service flying to the islands, private cays, and visiting yachts. In its after-work hours this M–7-235 serves its owners, Paul and Suzane Harding, as a conch diving platform. For fun, the couple lands above a shallow-water conch bed, anchors the plane, and hauls up the reward. When they want to sightsee, they dive to the seabed, lift the anchor, and—clinging to its chain—use the drifting Maule to tow them over more interesting territory.

Another M–7-235, this one used by Boca Grande Seaplanes in southwest Florida, leads an even more glamorous life. Its workaday role is to fly charter trips from Boca Grande to the Florida Keys. However, owner Mark Futch said he has also flown the aircraft in three movies and dozens of television commercials. A decade or so ago he took actress Katharine Hepburn out to an oyster bed where she sat on one of the floats and feasted. (At the time, Futch's wife was the stenographer for Hepburn's 1990s book, *Me: Stories of My Life.* Futch would come home from work to find Hepburn in his living room relating stories about Howard Hughes.)

In Washington State, John May uses his M–7-235 tailwheel model to track elk, cougars, bears, and fish from the air for state and federal fish-and-wildlife agencies.

The nosewheel-equipped MT–7-235 featured in this article leads a slightly less exciting life flying co-owner Scott Reiter of Pasadena, Maryland, to a 1,600-foot grass strip near Spencer, West Virginia, and to Daytona, Florida, to watch his favorite Nascar drivers, Sterling Marlin and Bill Elliott. Landing on a 30-foot-wide grass strip is obviously a job made for a Maule.

"This is an SUV," Reiter says. He also owns a Bellanca Super Viking and compares that aircraft to his Chevrolet Corvette Stingray. The Maule is his go-to airplane when heading to the backcountry. He sees an average cruise speed of nearly 130 knots.

With both front and back doors on one side of the fuselage, loading bulky objects is a breeze.

Our test flight confirms the impressive cruise speed. The flaps are unusual in that one of the four positions is a negative 7 degrees. That is, the flaps are slightly above the wing, something the manufacturer claims will improve cruise speeds. Here are the positions: With the handle full down the setting is minus 7 degrees; the first notch is zero degrees, the second is 24 degrees, and the third notch sets flaps to 40 degrees. The second notch is routinely used for takeoff while the third is used for landing.

Our flight test was conducted at 2,500 feet and yielded 125 KTAS with flaps at the zero-degree setting, and 127 KTAS with flaps in the negative position. Flights at higher altitudes would yield higher true airspeeds.

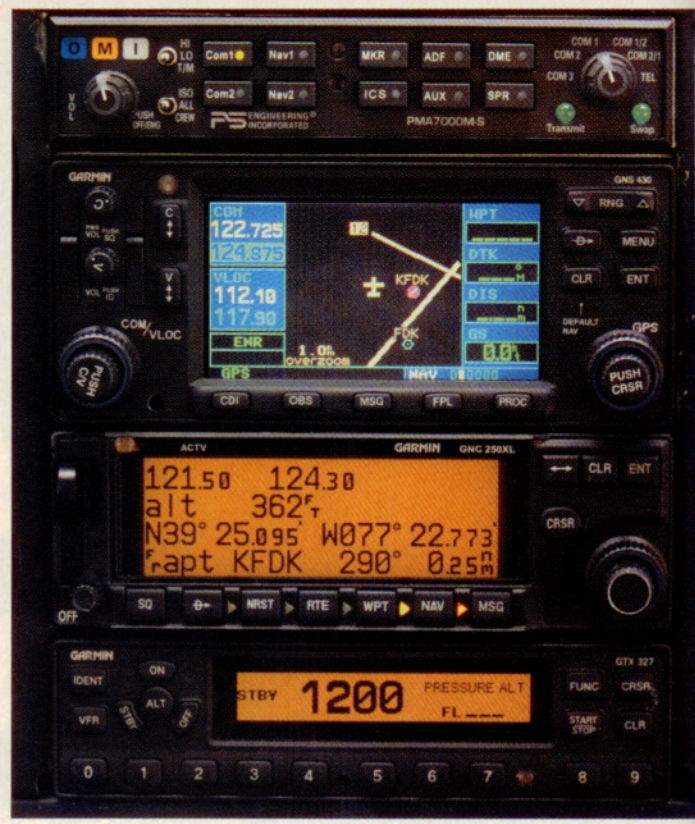
"With even the worst headwinds, you're still going to have cruise speeds in the three digits," Reiter says. He burns 14 gallons per hour at his normal setting of 75-percent power.

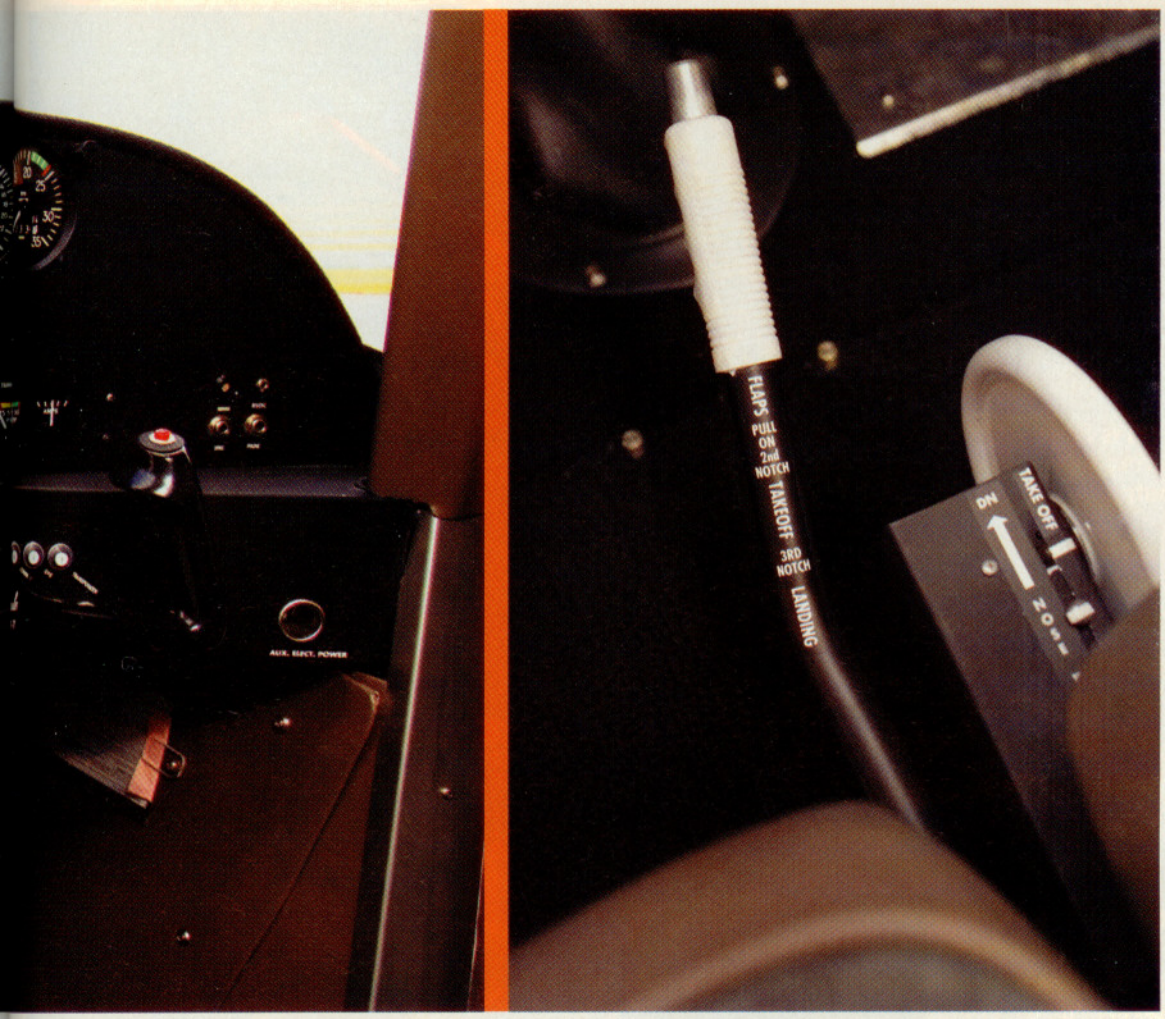
Reiter has just 33 hours on his new Maule: His overall verdict is that the aircraft does all it promises and offers tremendous utility, thanks to its takeoff and landing performance and

cruise speeds. He was asked for both his likes and dislikes based on his experience thus far.

On the plus side, Reiter finds it comfortable and praises its hands-off stability. During the *Pilot* test the aircraft proved Reiter's claim that it stays on heading and altitude with little coaxing when flying manually (he ordered it with a two-axis S-Tec System 50 autopilot). It seemed almost trucklike in stability, remaining on course and altitude for up to a minute before beginning a gentle bank in the direction of the fullest fuel tank. It can't be called trucklike in its payload, however. With all the options that Reiter has installed he can carry just 332 pounds with full fuel. However, since he probably doesn't need the Maule's full five hours of endurance (assuming no reserve), he can gain another 180 pounds of payload by not filling the two 15-gallon auxiliary tanks. That still gives him nearly three hours of cruising time with required reserves—and don't forget that respectable cruising speed.

He finds it simple to land and forgiving in that regard. He termed its grass takeoff and landing performance "awesome." During landing tests for this article, the author was able to land it in a few hundred feet as advertised. Reiter uses 85 knots on downwind, 70 on final, and 60 just prior to touchdown. A climbout at 80 knots with full fuel and two people on board resulted in a 1,000-fpm climb. Vortex generators on the wings improve handling at low airspeeds, and that was proven on the test flight during slow flight and stall recovery maneuvers. The airplane preferred to mush forward rather than do something dramatic.





Maule panels are beginning to look high-tech with the options now available from the factory. The flap handle can be set to a negative position, a trick that adds a couple of knots to cruise speed.

Other traits Reiter appreciates are its toughness, its roomy cockpit, and the power of its Lycoming IO-540 engine. He also appreciates the long list of options available from the factory. He should. After all, he and co-owner David Whisenant of Sykesville, Maryland, bought most of them. They include: observation doors that let you look through the bottom of the door as well as the oversize window, large observation windows in the rear, and a "super size" skylight with a shade that can be pulled to block the sun.

Pilot took advantage of that option during the formation photo flight for this article. The pilot window swings out for extra comfort during taxi in summer.

With both front and back doors on one side of the fuselage, loading bulky objects is a breeze.

For avionics options Reiter selected both a Garmin GNC 250XL GPS/com and a Garmin GNS 430 GPS/nav/com, and added a Garmin GTX 327 digital transponder to the list. The aircraft is certified for instrument flight.

He included the J.P. Instruments EDM-700 fuel-flow monitor and engine monitor to keep tabs on engine performance. The three-blade, 78-inch Hartzell scimitar constant-speed propeller improves performance and, frankly, looks cool on the ramp with its curved blades. A Tanis engine heater is among other options that were factory installed.

The aircraft comes standard with two main tanks that feed fuel to the engine by gravity, and two auxiliary tanks holding 15 gallons each that use a fuel-transfer pump to refill the main tanks. Pumping begins when the 21.5-gallon main tanks are indicated to be half-full. Flying with only partial fuel to allow a greater payload is easy—just don't fill the auxiliary tanks.

Finally, Reiter is pleased that he was able to order the aircraft from the factory with fittings already installed for floats—there may be some water operations in this aircraft's future.

Reiter was reluctant to mention some items he wishes could be improved, and emphasized that overall he is very happy with his Maule. That said, he finds refueling difficult, because invariably the gas overflows across the top of the wing, risking stains on his new paint. He also found that the wingtip paint was slightly different in color from the main wing. He would like the seats to slide back farther than they do for easier entry. (Maules are best entered by placing one knee on the seat, then dragging the other leg in. There is a bit of a human-pretzel quality to getting in the front seats.)

He also notices that the left tank seems to feed first when the fuel selector is in the Both position, causing an unequal

Hits and misses

Hits

- Fast cruise speed.
- Roomy.
- Easy to handle and easy to fly.
- Excellent takeoff and climb performance.
- Long list of options from which to choose.

Misses

- Payload with full fuel is limited.
- Paint color of the wing tips doesn't exactly match that of the wing.
- Doors sometimes difficult to close.
- Refueling is awkward and fuel often overflows, staining the paint.
- Flaps strike the rear door during preflight if door is left open.

fuel load and requiring the pilot to specifically burn from the right tank to even the tanks.

Continuing the list of minor gripes, he notes that if the rear door is open during loading operations, the pilot must be careful not to lower the flaps for the preflight inspection: They hit the door and could be damaged. Speaking of doors, Reiter said they are sometimes difficult to operate after climbing aboard—something also seen during the *Pilot* test. They could be closed, but with much attention and fiddling with the latch mechanism. Experienced Maule pilots can do it right the first time. Those were the only negatives Reiter could think of, and as he noted, none are major complaints.

The Maule has gained lots of class over the past decade. Once reminiscent of a rough field hand, the Maule is starting to look like (gasp) a city slicker. The interior has taken on a more polished appearance over the past 10 years, and the paint quality improved once the factory installed a modern paint booth. Factory representatives were asked about that famous take-off-from-anywhere, climb-like-a-spooked-mountain-goat performance. Is it because of the lighter construction? The MT–7-235, like most Maules, is a hybrid of composite, metal, and fabric covering: a composite engine cowling, metal fuselage covering back as far as the main gear, and Ceconite on the rear fuselage and tail.

The Maule performs well from short, rough fields.

i Links to additional information about Maule Aircraft may be found on AOPA Online (www.aopa.org/pilot/links.shtml).

No, factory test pilot Ray Maule said, it is more because of the airfoil. The one chosen was closest to the high performance that the late aircraft designer and Maule founder B.D. Maule wanted to achieve. Most of the Maule models, including the MT–7-235, use a slightly modified version of the Piper Super Cub airfoil. However, the wing used by Piper had a one-eighth-inch concave lower surface while the Maule wing is flat on the bottom. The airfoil was also used on the Piper Tri-Pacer, Apache, and Aztec, Maule company officials said.

Is all that performance needed? Maybe not, but it's nice to have. Reiter also uses his Maule on business, traveling the Northeast in support of his demolition business, but that's not why he and his partner bought it: They bought it 'cause it's fun. And it's nice to know the aircraft has more than enough capability to handle that West Virginia grass strip. AOPA

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SPECSHEET

Maule MT-7-235

Base price: $160,200
Price as tested: $192,000

Specifications

Powerplant	Lycoming IO-540-W1A5, 235 hp @ 2,400 rpm
Recommended TBO	2,000 hr
Propeller	Hartzell 78-in Scimitar, constant speed
Length	23 ft 8 in
Height	8 ft 4 in
Wingspan	32 ft 11 in
Wing area	165.6 sq ft
Wing loading	15.1 lb/sq ft
Power loading	10.6 lb/hp
Seats	5
Cabin width	3 ft 6 in
Standard empty weight	1,665 lb
Empty weight, as tested	1,757 lb
Max gross weight	2,500 lb
Max useful load	835 lb
Max useful load, as tested	743 lb
Max payload w/full fuel	424.6 lb
Max payload w/full fuel, as tested	332.6 lb
Fuel capacity, std	73 gal (68.4 gal usable) 438 lb (410.4 lb usable)
Baggage capacity	170 lb

Performance

Takeoff distance, ground roll (one pilot, half-tank of fuel)	250 ft
Takeoff distance over 50-ft obstacle	600 ft
Max demonstrated crosswind component	12 kt
Rate of climb, sea level (one pilot, half-tank of fuel)	1,500 fpm
Cruise speed/endurance w/45-min rsv, std fuel tanks (fuel consumption) @ 75% power, best economy, 2,500 ft	127 KTAS/4.1 hr (84 pph/14 gph)
Service ceiling	20,000 ft
Landing distance over 50-ft obstacle	500 ft

Limiting and Recommended Airspeeds

V_X (best angle of climb)	65 KIAS
V_Y (best rate of climb)	78 KIAS
V_A (design maneuvering)	109 KIAS
V_{FE} (max flap extended)	83 KIAS
V_{NO} (max structural cruising)	128 KIAS
V_{NE} (never exceed)	158 KIAS
V_{S1} (stall, clean)	54 KIAS
V_{SO} (stall, in landing configuration)	43 KIAS

For more information, contact Maule Air, 2099 Georgia Highway 133 South, Moultrie, Georgia 31768; telephone 229/985-2045; e-mail sales@mauleairinc.com.

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