# Short-Body Mitsubishi MU-2 Limited Edition

## Bargain price for a stellar performer

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**FOR LESS THAN ONE-QUARTER OF THE PRICE OF A NEW SINGLE-**engine turboprop, you can fly a Mitsubishi MU-2B that will cruise close to 300 KTAS and consume about the same amount of fuel.

Mitsubishi Heavy Industries built eight short-body models between 1965 and 1985 under two type certificates. Most desirable are the MU-2-26 "M", -26A "P" and -40 "Solitaire" because they have the highest MTOWs.

The -26A and -40 are certified in accordance with the updated A10SW TC. They can cruise at 28,000 ft. to 31,000 ft. and the four-blade props turn 20% slower than those of older aircraft. However, three-blade props make the -26 "M" 10-kt. faster.

The 1978-1985 -40 Solitaires are the ultimate MU-2B short-bodies because they came equipped with 1,000-shp -10 engines flat rated to 665 shp up to 16,000 ft. Serial number 430 and later models also were equipped with Sperry SPZ-500 flight guidance systems instead of Bendix M-4C/D autopilots.

We flew s.n. 351, a 1977 -26A P model, on a 940-nm mission with Rick Wheldon, head of Turbine Aircraft Services, for this report. The aircraft recently was refurbished with the -10 engine upgrade, fresh props, new Sagem flat-panel displays, new paint and interior, LED exterior lights and incorporation of 17 Service Bulletins. With all the new equipment, the single-pilot BOW actually decreased 123 lb. to 7,177 lb. Loaded with 2,700 lb. of fuel, tanks-full payload is 643 lb. NBAA IFR range is about 1,200 nm, according to Wheldon. Each additional passenger costs about 134 nm in range.

It's best to use a GPU to start the aircraft unless the twin nicad batteries are in tiptop condition. The Honeywell TPE331 engine's fixed-shaft design requires relatively high cranking power even though the props are locked in flat pitch to minimize drag. Flat pitch also makes the MU-2B howl at idle rpm in the chocks.

Once rolling, there's plenty of idle thrust to accelerate the aircraft, so we used beta pitch frequently to avoid riding the brakes. With 2,440 lb. of fuel and two occupants, aircraft takeoff weight was 9,887 lb. Using flaps 5 deg., $V_1/V_R$ was 105 KIAS and $V_2$ was 125 KIAS. Takeoff distance was 3,350 ft. Once airborne, we retracted gear and flaps and settled into a 180 KIAS climb. We reached FL 270 in 20 min. and cruised at an average 292 KTAS while burning 463 pph.

We were disappointed with the Sagem flat-panel displays. Left and right PFDs are not cross-linked. Selecting reversion modes erases pilot settings and causes the displays to revert to default altitude, heading, course and speed settings. Also, this is not a quiet, dark cockpit design and extraneous information is distracting. Some symbology jitters.

The Garmin G600 would be a better choice, in our opinion, because its design reflects dozens of OEM and line pilot inputs, plus better autopilot interfacing.

Our 940-nm trip from Montgomery Field Airport (KMYF), San Diego, to Garner Field (KUVA), Uvalde, Texas, took 3 hr., 13 min. with mild tailwinds, and total fuel burn was 1,590 lb., reflecting the aircraft's speed and fuel efficiency.

MHI built 351 short-body MU-2Bs, but only 177 remain in active service. The aircraft was designed from the outset as a high-performance turboprop, rather than a turboprop adaptation of an existing piston twin. Think of it as a turboprop-powered Learjet 23.

Similar to a Learjet, it's not dangerous in the hands of a well-trained pilot, but it's unforgiving of negligence. Thus, its historical fatal accident rate is 2.5 times higher than that of slower turboprops evolved from piston twins.

At the urging of TAS, the FAA finally issued SFAR 108 in February 2009, mandating formal initial pilot or requalification training for low-time MU-2B pilots and then annual recurrent training. The SFAR caused the accident rate to plummet. In the last three years, there has been only one fatal accident and it was traced back to a fuel control malfunction.

Years ago, mechanical malfunctions, particularly those linked to prop problems, caused many more fatal accidents. The MU-2B similarly doesn't abide shoddy maintenance. The FAA's Fort Worth office identified four mandatory continued airworthiness actions to be implemented, but none of the four were traced back as contributing to accidents.

Basic inspection intervals are 100/200/300 hr. or 12 and 36 months. TBO is up to 5,000 hr. and overhaul cost is $225,000 per engine. Prop overhaul is five years or 3,000 hr. After 15 to 20 years, the eight $5,000 blades usually have to be replaced.With all its upgrades, the asking price for s.n. 351 is $1.25 million. But more modestly equipped late-model MU-2Bs sell for $350,000 to $700,000. The difference in capital cost between a used MU-2B and a new single-engine turboprop can put $3,000 to $4,000 per month in your pocket. That buys a lot of fuel and maintenance. **BCA**