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Meet My Move-Up
The Mitsubishi MU-2

Greg Mink
Owner-pilot of two MU-2s

Also inside:

- Unfeathering Trap
- WX in Plain Sight
- Deciding Factors on Aircraft Mods
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Meet My Move-Up

The Mitsubishi MU-2

by **Dianne White**
Photos **by Paul Bowen**

Greg Mink, enthusiastic owner of two MU-2s, loves the aircraft's speed, efficiency and utility.

Seven years. That's how long Greg Mink has been talking to me about the MU-2. It started with a friendly email, a picture of his airplanes and an invitation to come visit. I'd politely decline, but Greg isn't one to take no for an answer.

Over the course of those seven years, I wrote about a variety of turboprops and light jets. Unfailingly he would write saying, "Yes that's a nice plane, but you really should check out what the MU-2 can do."

Seven years later, thanks to Greg's persis-
wtence, I finally get it. The MU-2 is one heckuva

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Spoilers located above the wing provides roll control. The full-span, Fowler-type flaps make short-field operations easier. Over a 50-foot obstacle, the MU-2 can take off and land in under 3,000 feet.

Faster, Farther, Higher

A native of Indianapolis, Mink grew up an avid motorcross competitor. After an injury, "I decided I needed a safer hobby," he said his dad purchased a Cessna 172 and at age 17, he had his private ticket. Soon after, he earned his instrument, commercial and multi-engine ratings.

With a degree in management from Indiana under his belt, he wasn't quite ready to enter the business world full-time. "I knew there would be a time and place for that, but right then, what I really wanted to do is fly jets."

He joined the Indiana National Guard in 1990, and for the next 10 years, he flew F-16s, logging around 1,800 hours flying the single-engine fighter. Around the year 2000, he joined his father's business, Modular Devices, and put his boundless energy to work growing the already successful company.

Modular Devices is a unique business concept. Founded in 1987 by Mink's father, the company rents mobile catheterization labs to medical facilities to use during in-house renovations or equipment upgrades. The labs, which are equipped for heart catheterization, angiography and electrophysiology, are identical in size and technology to those found inside hospitals. The only difference is these mobile units are on wheels. The labs are so complete, some facilities have used the installations for several years.

"We serve customers in all 50 states, especially in smaller communities where they may have less space in their existing building," explained Mink. "That's also where an aircraft plays a big role."

Initially, Mink owned a Cessna P201, but quickly saw a need for more speed and capability. In 2003, he purchased a Cessna 414, which he owned for two years. Using the aircraft extensively to visit customers and follow up on installations, Mink saw the immediate difference to the company's bottom line. Wanting more speed and altitude capability to get over weather, he was ready to move into turbine power.

"I looked at everything on the market," he said. He considered the Piper Meridian, but found the cockpit too cramped for his height. The King Air C90 wasn't fast enough either.

"I wanted something that could do 280 to 300 kts," Mink said. "That brings you to the Garrett-powered

What has been borne out after years of analysis and study by the FAA is that poorly trained pilots are the real culprits, not the airplane. Since a set of training criteria was mandated in an SFAR, the accident rate has dropped dramatically. In the last five years, there has been only one fatal accident. No other turboprop can beat that record.

Pat Cannon, who runs the highly regarded PROP safety seminar for MU-2 owners and pilots for Turbine Aircraft Services, said, "The reduction in accidents is 80 percent due the SFAR and 20 percent due to the diligence of the owners. We have highly safety-conscious owners."

PROP (which stands for Pilot's Review of Proficiency) attracts about 400 attendees, capturing the majority of current MU-2 operators. It is held in multiple cities on even-numbered years. MU-2 owners who attend PROP don't earn training credit toward the SFAR, but many receive an insurance discount for attending.

After talking with a number of people familiar with the MU-2 and flying the aircraft himself, Mink became convinced that the aircraft had gotten a bum rap. The aircraft had the performance and capability he needed. And with the right training, he knew this aircraft was perfect for his needs. He purchased his first MU-2, which eventually led him to own the two aircraft he operates today: a short-body "K" model equipped with upgraded TPE331-10 engines (originally equipped with -6 engines); and a long-body Marquise.

Mink initially completed three days of MU-2 intensive training and is committed to regular recurrent training. His military flying background contributes to his discipline to train and fly as he's trained.

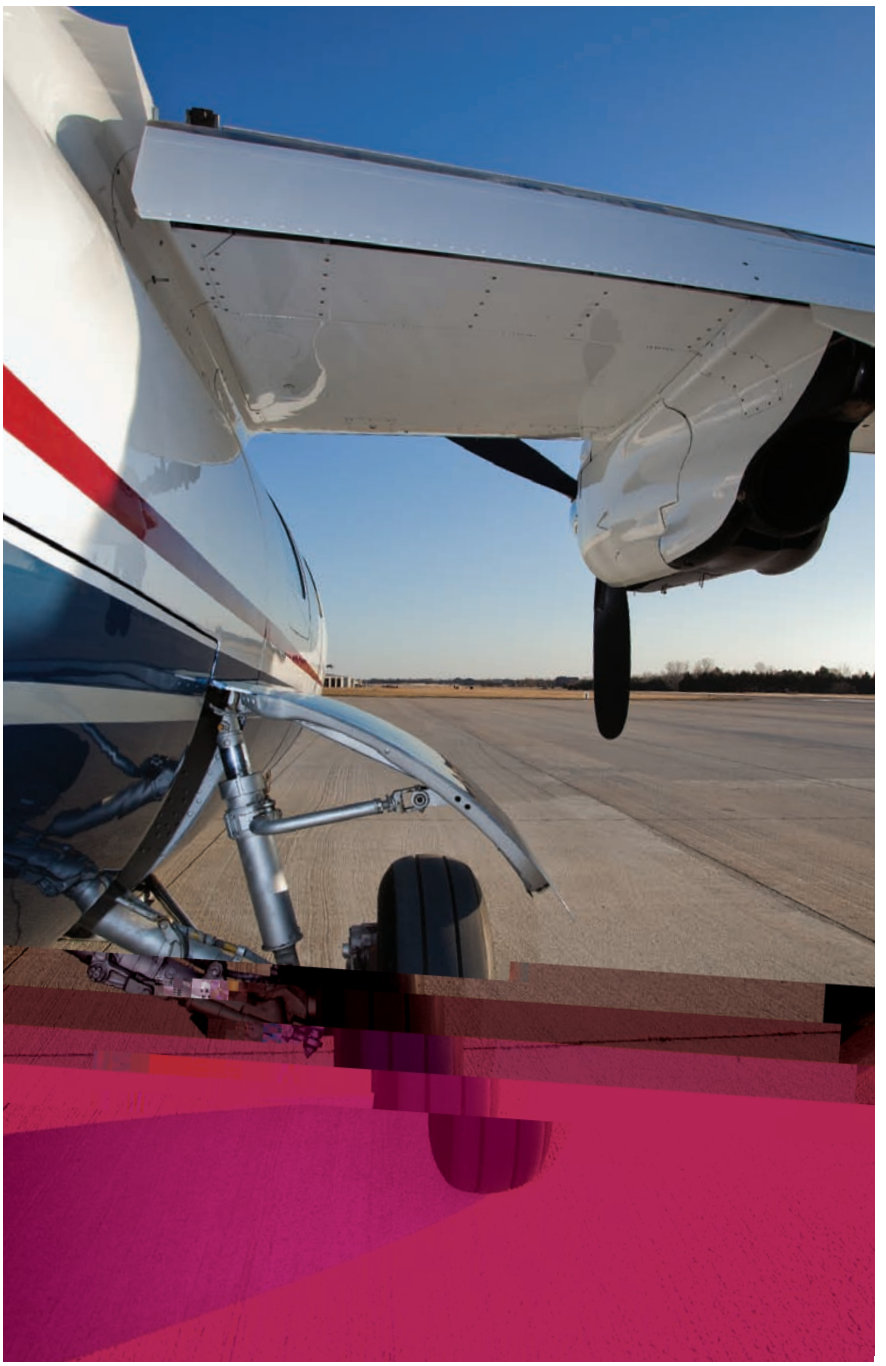
"This aircraft has the speed and capability comparable to a light jet. Thus, I think it's important to approach training as you would flying a jet," he said. "Go to an approved trainer and fly it in a disciplined manner, which is what a pilot of any aircraft should do."

Unique Design Features

Mitsubishi designed the original as a high-wing aircraft with a circular section fuselage, retractable tricycle gear, and large wingtip fuel tanks. Two Turbomeca Astazou engines were slung beneath the wings, although those powerplants were quickly abandoned in favor of the Garrett TPE331 turboprops.

The unique wing design contributed to the aircraft's great high-speed performance, which is aided by a system of spoilers located on the top of each wing. This makes

One difference between the short-body and long-body versions is how the electrically powered and mechanically driven gear retracts. On the short-body, the gear retracts aft into the fuselage. On the Marquis, the gear retracts forward into fairings.



it possible to fit a full span of Fowler-type flaps without concession to other control surfaces. The result is a super-fast aircraft that has great short-field performance.

The plane is built around two keel beams that run the length of the airplane, with the gear attached to them. As a result, the fuselage absorbs much of the energy on touchdown.

The aircraft is built like a tank, which is evident in the fuselage section. When you lean against the airplane's fuselage, you don't hear "coke-canning" you often experience with other aircraft. Mitsubishi probably could have made the plane lighter, but they chose structure strength over weight savings. As a result there are no life limits on the airplanes. Several are currently operating with more than 24,000 hours on the airframe.

The wing's small design necessitated the need for tip tanks. The fuel system consists of five fuel tanks: a main tank in the center, two tanks in the wing and the tip tanks. One advantage of the MU-2 is that there are no fuel imbalance issues to worry about, especially in a single-engine scenario. The tanks empty into the main so that aircraft always keeps itself in balance.

When studying the model lineage, it is easy to get confused on the different letter-designated models created over its 20-year production run. Most people think of the MU-2 as either "long-body" or "short-body." Although there are A through S variants of both – some of them military versions – the last two MU-2s produced were given names: the Marquise (long-body) and the Solitaire (short-body).

Performance

Mink loves the aircraft's performance and when examining his numbers, it's easy to see why. In his short-body MU-2, he can typically get to FL250 in 13 minutes at +5 ISA. Once at altitude, he normally sees a 303 KTAS (+1 ISA) burning 76.5 gph.

In the long-body Marquise, Mink generally flies between FL200 and FL280. MU-2s are not RVSM approved as the expense of the certification would be hard to justify for the benefit of accessing only 3,000 feet up to the aircraft's 31,000-foot certified ceiling.

At FL220, the Marquise produces a true airspeed of 295 (-2 ISA) with 89.5 gph. At FL270, he sees 293 KTAS at 78.5 gph (-4 ISA).

While there is minimal speed penalty between the two aircraft, the Marquise has impressive load-hauling capabilities. With a full fuel load of 2,700 pounds, the long-body version can carry 1,100 pounds in the cabin.

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Mink's short-body "K" model has been retrofitted with the more powerful TPE331-10 engines for better performance.

Photo courtesy of Greg Mink.

Although the speedy MU-2 is in the same class of airplanes as the King Air and other turboprops, it needs to be flown and maintained like a jet. Since specific FAA-mandated training was instituted for the aircraft, its safety record is the best in its class.

In the pattern, Mink advises that you fly it with the same respect you would a light jet: Fly a normal pattern, hit your speeds and the aircraft will reward you with a sweet landing. Thanks to those big full-span flaps, shorter runways are no problem.

On one engine, the MU-2 flies just fine and won't plunge out of control as many naysayers might insist. However, this is where MU-2 training is critically important. The aircraft has specific techniques that must be employed, although none that require Chuck Yeager-like flying abilities.

Mink often uses the short-body MU-2 when flying for company business. At times he will fly parts and technicians to a customer site, or he will fly customers to visit another mobile cath lab installation in different city. When he has big loads of equipment or people to move, he employs the Marquise.

The aircraft are invaluable tools for my business," he added.

Nothing Wrong with This Picture

So let's review here: The MU-2 is a turboprop that performs almost as well as a jet, but has a larger, flat-floor cabin. It can take off and land under 3,000 feet, but regularly cruises in the neighborhood of 300 KTAS. Although it has been out of production since 1983, it has award-winning product support and a safety seminar that is world-renowned. Finally, it has a safety record that rivals or even beats other turboprops in its market segment, yet costs hundreds of thousands less.

As an enthusiastic owner and self-admitted evangelist for the MU-2, Mink said some people may never get beyond the stereotypes. However, he feels a personal responsibility to share its story to everyone who will listen, including this editor.

"Once you spend time getting to know the MU-2, you'll understand that it's a fantastic airplane. It's fast, efficient, has plenty of power and a great cabin. There is also a great group of maintainers out there who have a wealth of knowledge about operating it," he explained. "I wouldn't own anything else."