

# Aviation Maintenance

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A man in a dark leather flight jacket with patches, including one that says "TRADE Airm", stands with his arms crossed next to a large aircraft tire. The background shows a clear blue sky and a white aircraft fuselage.

## BILL MORALES Growing by Wheels and Brakes

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The New World of  
**Custom**  
**Wheel & Brake**  
Service

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Mastroianni

Already the third-largest wheel and brake service company, **Messier-Bugatti-Tracer** is quickly filling a growing need for flexible and fast service.

Bill Morales, president and  
CEO, Messier-Bugatti-Tracer.



**W**heels and brakes always wear out, they are not complicated, but they are crucial to safe operation.

For Bill Morales, president and CEO of Messier-Bugatti-Tracer, wheels and brakes offer an outstanding opportunity to bring modern service to what may seem like an uninteresting aspect of the aircraft maintenance business. What it boils down to is that wheels and brakes deserve just as much high-

quality attention as any other critical aircraft component, and Morales and his team are focused on providing service that meets that requirement. “I don’t want to be the one to ground the customer’s airplane,” Morales said.

The formation of Messier-Bugatti-Tracer stems from Morales’s background as a U.S. Marine Corps helicopter pilot. Morales pulled two stints in the Marines. At age 25 he was offered the opportunity to learn to fly. “I’d better do it now,” he recalled thinking at the time. He earned his wings in September 1983 and ended up flying AH-1H Cobras and on deployments in the Mediterranean off the coast of Beirut, Lebanon.

Career options for former Marine helicopter pilots in the late 1980s weren’t stellar. Airlines for some odd

reason didn’t take helicopter pilots as seriously as their fixed-wing counterparts, and airline flying simply wasn’t compelling enough for Morales to scratch out a living accumulating fixed-wing flight hours in order to become attractive to the airlines. Fortunately, he said, “in the Marine Corps I did a lot of maintenance and I really enjoyed the support aspect.” What Morales sought was somehow to combine his talents with the ability to turn products around quickly, the way aircraft maintenance was done in the Marine Corps.

He began looking into the repair station arena, then started working with a fellow former Marine in the parts brokerage business. “He was a master,” Morales said. “You learn how to source materials and to break down doors at airlines.”

Morales’s apprenticeship in the parts brokerage business was interrupted by the war in Iraq, and in October 1990 he joined HML 776 at NAS Glenview in Illinois, then was activated in Desert Storm the following January and witnessed the U.S. Navy’s supply chain first hand. For 11 months, Morales added to his



(Left) Edwin Jorge checking tire pressure. (Right) NDT expert Tom Ketchel. (Top) Josh Covelli in Tracer’s warehouse.

Messier Services, the maintenance, repair, and overhaul arm of landing-gear manufacturer Messier-Dowty and equipment manufacturer Messier-Bugatti (both part of the Snecma Group), is preparing for a surge in growth. Forecasts for airline traffic reflect a decline in revenue passenger miles caused by the economic conditions of the past three years, followed by growth that should continue for at least another decade.

For Benoit Gosset, chairman and CEO of Messier Services, now is the time to refocus the company to make sure it is ready for opportunities that are sure to come. "We're trying to rationalize and look in the future where we have to be," he said. "For example, there is no reason to be doing [Boeing] 727 work. What is important in the future?"

Programs that Messier Services is actively pursuing now include modern Airbuses such as the A319/320/321 and A330/340, plus the newer Boeing 737 models and the burgeoning fleet of Embraer and Bombardier regional jets.

Messier Services employs more than 1,300 people at its facilities in North America (3), Europe (4), and Asia/Pacific (3). Services include MRO for landing gear and hydraulic components and also 24/7 support and parts distribution.

At Messier Services America, the company's main U.S. landing gear facility in Sterling, Virginia, president Robert Grainger is one of the architects of Messier's move to focus on profitable product lines. Grainger moved to Virginia after transforming the Messier Services facility in Gloucester, U.K. "It's better to be proactive and change," Grainger said.

The changes that Grainger is referring to include a major revamping of the Sterling plant, with the goal of speeding turn time of landing gear assemblies and hydraulic components. New features include a modern air-conditioned plating



CEO Benoit Gosset

shop, a huge inside/outside-diameter grinder than can handle up to 100-inch landing gears, a 5,000-gallon capacity wastewater treatment plant, an automatic parts sorter/picker, and a tall wash cabinet affectionately dubbed the "Hurricane."

The wash cabinet can handle fully assembled landing gear up to, but not including the A340. Before installing the Hurricane, technicians carried out the nasty job of disassembling the landing gear and washing the individual parts that were coated with years of baked-on grime. Now, after a gear arrives, it immediately cycles through the Hurricane, where it is blasted with a heated 163-pound per square inch water and mild soap mixture. When a landing gear leaves the Hurricane, it is a pleasure to work on, much more appealing to the technicians, not to mention the vast amounts of time saved.

Grainger is convinced that now is the time to prepare for rapid growth. "Barring economic meltdown," he said, "airplanes will still be flying. If people fly, they have to maintain the airplanes. And I'm the company that maintains them. We're narrowing our focus to be more efficient. "And we're maniacally focused on the customer, what's important to the customer."

Messier Services CEO Benoit Gosset is also quite sure that business is poised to improve. Following the last recession in the early 1990s, "business picked up rapidly," he said. "Today we are in over-capacity, but in a couple of years, we'll see the same thing happen."

knowledge of supply chain management. "I got to see the Navy's supply system," he said, "and how we moved parts. I got intrigued by the whole idea."

After Desert Storm, Major Morales returned to the parts brokerage then decided it was time to be on his own.

Morales and another former Marine, Steve Nicholson, formed a company called Tracer in 1993, which started by offering cargo parts support for Stap Industries and services for Tranco (now Goodrich) and a company called Aero Tire and Tank, which evolved into Thompson Aero. Morales bought Nicholson out in 1995.

Of the three primary customers, Thompson Aero was the busiest and the main focus was wheels and brakes. Not only did Morales get good at supplying wheel and brake parts and working with the companies that manufactured them, but he perceived a

strong need to develop his own overhaul capability.

In the mid-1990s, Thompson Aero decided to get out of the wheel and brake business and offered its store of material to Tracer, which launched Tracer seriously into wheel and brake repair and overhaul. Tracer bought Thompson's inventory and opened a warehouse and repair center called Milwaukee Centerline in Milwaukee, Wisconsin in June 1996.

With just \$300,000 in revenues in 1996, Morales recalled, "we needed more volume." He learned that Sun Country Airlines had put out a bid to renew its wheel and brake contract and he aggressively pursued the small airline's business. The advantages for Tracer were that Sun Country operated older aircraft, which tend to get less attention from top-line MRO companies, plus the biggest competitor offered four-day shipping, something

that Morales felt that Tracer could easily beat. It also helped that Tracer opened a new repair and overhaul facility—Miami Centerline—in Florida, bringing the work closer to the customer instead of forcing the customer to endure shipping delays. And Tracer built a pool of spares near Sun Country's main base, further speeding turn times. "It's more like you're a partner when you invest by putting spares in their location," he said.

By this time, Tracer was growing to the point where it could attract talent from larger companies. Morales hired Matt Axelson from Goodrich to run the new Miami facility. And Morales realized that serving the fleet of older commercial jets was not going to help build Tracer into a big company, so he started looking to service wheels and brakes on modern aircraft. To help in this, Morales hired Paul Severin away from Honeywell's big landing gear/

wheel and brake division, with whom he had worked in the past arranging work or purchases for Tracer.

In a stroke of serendipity, Severin had a strong relationship with people at Messier Services and Messier Dowty, and he arranged a meeting between Messier and Tracer personnel at the 2001 Paris Air Show. In another bit of good timing, Boeing had selected Messier to provide carbon brakes and overhaul services for 200 C-17s. To fulfill this contract, Messier had to build carbon-brake manufacturing capability in the U.S., but it also had to provide U.S.-based overhaul services as well. The Messier folks visited with Morales and took a careful look at Tracer, then asked Morales if he would be interested in a partnership.

Messier had signed the C-17 contract with Boeing in June 2002. Shortly after that, Messier and Tracer agreed to form Messier-Bugatti-Tracer, a wheel and brake repair and overhaul company. The deal closed in December 2002. Messier essentially purchased 60 percent of the new partnership company, Messier-Bugatti-Tracer. Morales kept Tracer as a separate independent company to market used wheel and brake parts and material produced by Messier-Bugatti-Tracer. Tracer also owns an online parts-trading company called TradeAir ([www.tradeair.com](http://www.tradeair.com)), which Morales launched in 1999. Having TradeAir as part of the corporate family doesn't necessarily bring in a ton of money on parts sales, but it does make finding material such as wheel and brake cores that much easier for the Tracer team.

Even with the large investment by Messier, Morales retains the flavor of a smaller company, and he is convinced that independent companies can give the OEMs a run for their money. "You can't always determine whether you're taking care of the customer by whether you're making money or not," he said. "It always seemed like OEM customers were dissatisfied. I want to do business with people who like me. I don't think you can ever win an argument with a customer. Their opinion



(Top) Joseph Vazquez completing a 727 brake assembly. (Right) Leonard Smith cleaning a wheel casting before the overhaul process begins.



changes if you have negative words, all it does is piss people off, but it creates opportunity for us. We'll always let a customer win." Morales said that he tells his program managers that "if you have to pay overnight shipping to satisfy a customer, go ahead. It makes it a non-incident for the customer. If we take care of the customer, profits will work themselves out."

With the high-powered talent that Tracer has been able to add after the deal to form Messier-Bugatti-Tracer, Morales is setting his sights toward the "Supercenter" concept. The idea is to create four U.S.-based Supercenters to handle wheel and brake work for the huge number of new customers that Morales envisions as part of Tracer's and Messier-Bugatti-Tracer's future. "My vision," he said, "is we want to do with wheels and brakes what GE has done with engines."

That vision includes automating some of the more tedious processes that the wheel and brake repair and overhaul process entails, especially cleaning.

The Supercenter plan calls for two more wheel and brake overhaul locations, one on the East and one on the West Coast, plus the existing Miami and Milwaukee sites. Spares at co-located sites outside the U.S. would flow to one of the four Supercenters.

The large aircraft wheel and brake market is worth about \$1.3 billion per year, Morales said. Only about a quar-

ter of that is outsourced, which offers great opportunities for companies like Messier-Bugatti-Tracer. "It's a great environment to put unsolicited proposals in front of airlines," he said.

To meet the demand, Messier-Bugatti-Tracer will have to become vastly more efficient. The company recently signed up for new software from Avexus to help not only manage the operation but also provide instant Web-based access to customers who want to log on to place orders and track the progress of their products.

The company also is managing the logistics of buying and selling parts to ensure quick access to needed products when the customer calls. "Use of logistics and spares can get you through any jam," Morales explained.

Morales and his team are keeping a keen eye on the aftermarket, ever mindful of the opportunity to take on what might be a huge amount of outsourced work for cash-strapped airlines that have been doing work in-house. "If you're an airline," Morales concluded, "we're going to go after you." ■ **AM**

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