



The \$4.5 million HondaJet is expected to win FAA approval shortly.

Honda Flies High

The firm's light jet is faster, quieter, and roomier than the competition

By Mark Huber

HONDA MOTOR HAS LONG BEEN A CROWD pleaser. Its cars, motorcycles, and lawnmowers are consumer favorites around the world. Now the Japanese giant is about to try its hand at producing a light jet, and by all indications, the plane will be another winner.

The unusually light and speedy HondaJet, priced at \$4.5 million and capable of carrying four to six passengers, looks set to win Fed-

eral Aviation Administration certification by first-quarter 2015. It will be the most expensive aircraft in its class, but buyers already are lining up. The company claims that its first two years of production are sold out, though it refuses to disclose exactly how many jets it is capable of producing per year.

Honda has been quietly laying the groundwork for this since 1986. Back then, wanting to better understand aircraft design, Honda sent Michimasa Fujino, now 54, to Mississippi State

University's Raspet Flight Research Lab. It was at Raspet that the young Honda engineer eventually designed and built two research aircraft.

The second of these, the MH02, was an all-composite, 8,000-pound, high-wing twin jet with the engines mounted atop the wings, which Fujino would later enhance and dub Otwem, for over-the-wing engine mount, since that was the key distinguishing feature of the plane. He figured that this aesthetically challenged configuration—which looked vaguely like a giant

attacking insect from a 1950s horror movie—would allow for bigger cabins and improved aerodynamics. After Honda green-lighted a move into the light-jet market, Fujino set about converting his MHO2 research into a commercially viable aircraft.

As Fujino and his team refined the jet over nearly a decade, they also built a massive, state-of-the-art manufacturing, engineering, and service center in Greensboro, N.C.—for an estimated \$140 million. This is now Honda Aircraft, where Fujino serves as CEO and oversees more than 1,200 employees.

The HA-420 HondaJet will have lightweight and fuel-efficient engines built by a Honda-General Electric partnership. Honda plans to market its plane and create a customer experience similar to what it provides for buyers of its Acura line of luxury automobiles, with Fujino telling us that the company will be “very focused on the customer.”

The last attempt at developing a jet in this



The HondaJet cabin, above, at over 300 cubic feet, is nearly 20% larger than cabins in competing planes; passengers in the “club four” seats no longer have to play footsie. In the cockpit, below, real-time moving maps and GPS alert pilots to runways and dangerous terrain, reducing workload so the jet can be flown by a single pilot.



class while simultaneously creating a new company was Eclipse, the firm that made the Eclipse 500 Very Light Jet. Eclipse headed off to bankruptcy with total liabilities of over \$1 billion.

But Honda seems prepared to pay the price, perhaps revving ambitions for bigger airplanes further down the runway. The HA-420 project has already faced several costly delays, including an engine redesign deep into the flight test program. But it now appears that the HondaJet is nearly ready for takeoff. Customer orders already moving down the assembly line could eventually add up to 100 airplanes a year.

With a top speed of 483 miles per hour, this jet is the fastest and most fuel-efficient in its class, which includes planes such as the Embraer Phenom 100E and the Cessna Citation M2. The HondaJet’s sophisticated Garmin G3000 avionics marries GPS signals to real-time moving maps in the cockpit that display and alert

pilots to runways, terrain, and hazards. The avionics, meanwhile, significantly reduce cockpit workload, allowing the aircraft to be operated by a single pilot.

The composite fuselage doesn’t require traditional ribs and stringers—frames that hold aluminum skins in place on conventional aircraft fuselages. This yields more cabin space, and the plane’s carbon-fiber composite is considerably lighter and stronger than metal.

The HondaJet cabin is five feet wide and nearly five feet tall—generous dimensions for an aircraft in this category. While still not a stand-up cabin, it offers noticeably more head, shoulder, and leg room than in competing light jets, and there is, miraculously, no need to do a limbo dance to get to or from your seat.

Furthermore, the unusual over-wing engine positioning not only provides aerodynamic benefits but also results in a quieter cabin with

less vibration.

Pretty neat. The cabin has been designed with 60 cubic feet per passenger and a 43-inch seat pitch, after ergonomic studies showed such dimensions would accommodate 98% of the population; passengers in facing “club four” seats no longer have to play footsie with one another. The cabin, at over 300 cubic feet, is nearly 20% larger than those of its competitors.

Customers, when ordering their planes, can opt for several different cabin layouts that range from four single reclining executive seats to various cabinetry/refreshment-center options in place of a side-facing seat. Cabin windows can be electrically dimmed. Passengers can control the windows, cabin lighting, and in-flight entertainment and information system via personal electronic devices.

The entertainment system features audio/video on demand, an interactive 3-D moving map, an exterior camera, and optional SiriusXM satellite radio. The HondaJet aft lavatory has a privacy door—a feature mostly absent in light aircraft, much to the chagrin of many customers. Even the luggage space, at 66 cubic feet, is generous.

This summer, Honda triumphantly flew the first production HondaJet to the Experimental Aircraft Association’s annual AirVenture gathering in Oshkosh, Wis., where Fujino was greeted like a rock star by cheering fans. Looks to us as if Honda doesn’t just have a light jet on its hands—it has a rocket. ■

MARK HUBER is a private pilot who reviews aircraft for Business Jet Traveler.