Lights in the sky

FlyCorporate’s look at the current wave of light jets

FC Interview:
Michimasa Fujino
President and CEO
Honda Aircraft Company
Honda Aircraft has built six FAA-conforming HondaJets in addition to the prototype. These consist of four active flight test aircraft and two ground test aircraft.

Prototype:
- N420HA s/n P001
  - First flight – Dec 3, 2003

Flight test aircraft:
- First conforming aircraft
  - N420HJ s/n 42000001
    - Silver/white
    - Used for aerodynamics, performance, and stability and control testing.
- Third conforming aircraft
  - N420HM s/n 42000002
    - Red/white
    - Used for mechanical systems testing.
- Fourth conforming aircraft
  - N420AH s/n 42000003
    - Yellow/white
    - Used for avionics and electrical testing.
- Fifth conforming aircraft
  - N420NC s/n 42000004
    - Blue/white
    - Used for cabin systems testing, and for interior and options testing. Will also be used for FAA function and reliability testing.

Ground test aircraft:
- Second conforming aircraft
  - Used for structural testing. Was retired from ground test programme in 2012 after successfully completing all ultimate load testing, EASA bird strike test, and seat attachment testing.
- Sixth conforming aircraft
  - Joined ground test programme in Oct 2012 and used for structural testing. Currently being used for static testing and damage tolerance testing.
Honda Aircraft Company President & CEO Michimasa Fujino is spearheading his company’s progress towards certification and full production of the HondaJet. He talked recently to FlyCorporate’s Cameron Heffernan about the programme’s current status and how he hopes to develop a new market with this highly distinctive light twinjet.

At EBACE this year, you announced that the expected FAA certification of the HondaJet had now been pushed back to the fourth quarter of 2014 – a development which you called “regrettable.” Now, several months later, could you give us a progress update looking towards certification and first delivery?

We continue to achieve significant milestones in the development of the HondaJet. The programme is steadily approaching the final phase of flight testing, and manufacturing has transitioned to the production of customer aircraft. At the same time, Honda Aircraft Company continues to build the infrastructure and talent for R&D, manufacturing and service.

Our flight test fleet maintains a very active schedule and continues to complete milestones for FAA certification flight testing. (See chart on p 27.) This includes testing of stability and control; performance; mechanical systems such as landing gear; environmental controls; steering and braking; and avionics and electrical systems. Most recently, we successfully conducted “wet runway” water ingestion testing at the NASA Wallops Flight Facility in Virginia to examine the effects of water spray.

Our most significant achievement this year was the first flight of our fifth FAA-conforming HondaJet in May. We are using this aircraft for cabin system testing, interior testing and options testing. It will also be used for FAA function and reliability testing.

In July, our third and fifth FAA-conforming aircraft were featured at EAA AirVenture 2013 in Oshkosh, Wisconsin. The event marked the first public appearance of an FAA-conforming HondaJet. The fifth conforming HondaJet is the final configuration of a customer aircraft and has a production interior. Some HondaJet customers visited us at the show and were very excited to see the aircraft. Also during the airshow, the red and blue Hondajets did a special flight demonstration that included a formation flyby. It was spectacular and the audience was impressed with the quietness of the jet. It was truly a special day for me and our associates working on the programme. »

Our most significant achievement this year was the first flight of our fifth FAA-conforming HondaJet in May.
In manufacturing, we have fully transitioned to the production of customer aircraft. Construction of our customer service facility in Greensboro, North Carolina, is also on schedule for completion this fall. In addition, we continue to invest in advanced technologies that fully integrate engineering, manufacturing, customer service and administrative functions.

Have there been any positive aspects of the certification delays?
We have maximised use of the available time to refine and develop our processes, such as lean manufacturing techniques. Collaboration between engineering, production control, supply chain and manufacturing continues to refine the processes and workflow necessary to achieve lean production and quality requirements for the FAA production certificate (PC).

Our production line is maturing, and I think we are well positioned to achieve a PC for the aircraft soon after FAA type certification is granted.

We have also formed a great team and culture at Honda Aircraft Company. We have a very talented team of associates who have passion for aviation, and excitement here is building as we get closer to bringing the product to market.

Looking back at the early days of the HondaJet’s research and development, how did the economic crisis affect your development and go-to-market strategy, if at all? What additional challenges were introduced?
The light jet market is softer as a result of the economic crisis, but we look at the long-term trend of the market. Potential demand for very efficient jets such as the HondaJet always exists, so the crisis did not affect our long-term business strategy much.

Our goal with this aircraft is to create a new market by introducing new value – a high-performance light jet with class-leading efficiency, quality and comfort.
How do you feel about the state of readiness of your maintenance and support network?
Customer service is just as important as delivering a product, and our goal is to provide the best service from day one.

We are establishing a good foundation for service with the HondaJet dealer network. We have appointed HondaJet dealer representatives in North America and Europe to provide local sales and product support for our customers. Each of these dealerships is diligently preparing for HondaJet entry into service and will provide our customers with the quality of service expected from Honda.

Our new customer service facility currently under construction in Greensboro will complement our dealer network and provide aftermarket support for the HondaJet. In addition to MRO activities, the facility will house technical support, field service, warranty and customer programmes.

We also continue to develop our flight training programme. Pilot training is an important factor for safety, so we are putting significant effort and investment behind this programme. Our full-motion Level D simulator will be installed at our corporate headquarters next year, and we will conduct the flight training programme for all HondaJet customers.

Based on where we stand now, how would you evaluate the programme today and how does that compare with where you wanted to be when you launched the subsidiary in 2006?
It is well known that airplane development and certification are not easy tasks. The certification process is very complex and can take a great deal of time to complete. I never underestimated this when I founded the company. I admit that I face several challenges, especially on the supplier management side, but I always have and continue to do my best to support and collaborate with suppliers to accomplish tasks.

It has taken longer than expected, but I strongly feel that I have now created a solid foundation to certify the aircraft in-house. I have confidence that we will deliver the world’s most advanced light jet to meet our customers’ expectations.

All along you have been stating that you have more than 100 orders for the aircraft. Can you give us any update on that figure now, just prior to NBAA?
We have been very pleased with the market response to the HondaJet – and yes, we have more than 100 orders.

What will success look like to you for Honda Aircraft and how do you quantify that success?
My target is to deliver an advanced light jet that will change the current market and eventually change people’s lifestyles. This is my big dream. If the HondaJet contributes positively to how people travel in the future, this will also lead to business success in my venture.
Honda Aircraft has built six FAA-conforming HondaJets in addition to the prototype. These consist of four active flight test aircraft and two ground test aircraft.

**Prototype:**
N420HA s/n P001
First flight – Dec 3, 2003

**Flight test aircraft:**
- **First conforming aircraft**
  First flight – Dec 20, 2010
  N420HJ s/n 42000001
  Silver/white
  Used for aerodynamics, performance, and stability and control testing.

- **Third conforming aircraft**
  First flight – Nov 18, 2011
  N420HM s/n 42000002
  Red/white
  Used for mechanical systems testing.

- **Fourth conforming aircraft**
  First flight – May 4, 2012
  N420AH s/n 42000003
  Yellow/white
  Used for avionics and electrical testing.

- **Fifth conforming aircraft**
  First flight – May 16, 2013
  N420NC s/n 42000004
  Blue/white
  Used for cabin systems testing, and for interior and options testing. Will also be used for FAA function and reliability testing.

**Ground test aircraft:**
- **Second conforming aircraft**
  Used for structural testing. Was retired from ground test programme in 2012 after successfully completing all ultimate load testing, EASA bird strike test, and seat attachment testing.

- **Sixth conforming aircraft**
  Joined ground test programme in Oct 2012 and used for structural testing. Currently being used for static testing and damage tolerance testing.

We have been very pleased with the market response to the HondaJet – and yes, we have more than 100 orders.
THIS NEW TECHNOLOGY IS THE REASON FOR YOUR NEW JET.

A breakthrough in aircraft engineering, the Over-The-Wing Engine Mount (OTWEM) is a revolutionary design that you’ll find only on the HondaJet. With OTWEM, expect a quieter, faster ride with greater fuel efficiency, more cabin space and a fully private aft lavatory. Just a few more reasons you’ll want one.

See OTWEM in action at hondajet.com.